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The Philosophy of David Hume[1]

Two questions it is necessary to ask ourselves in making a critical study of the writings of any philosopher, viz.,

1. What do *they* mean ?
2. What does *he* mean ?

In the case of some authors the two questions can be answered almost as one —but more often the questions are distinct, and it is possible to find great agreement among critics as to the answer to the first question, together with great diversity as to the answer to the second. To attempt the second question without having faced the first is the work of the dilettante in philosophy—to speak more bluntly, of the shirk. The student *can* go at his study of philosophy that way, gleaning his whole notion of the contribution of any philosopher from the comments he finds in histories of philosophy, but there is little real satisfaction in such second-hand acquisition. For the true student the starting point is the actual text of the philosophical works in question—in translation if need be—read and reread, now meticulously with a view to giving each word and phrase its due weight, examining, analyzing ; now skimmingly, to see the thing as a whole, synthesis instead of analysis, the telescope to sweep the whole range of the subject instead of the microscope to bring out nicety of detail.

But when we have done this, when we have become familiar with our author's every turn of expression, and when his treatise as a whole lies spread before us as a familiar landscape, there remains the second question, and to stop short of answering it—or of at least attempting to answer it, is to drop our inquiry just as it comes to its point of keenest interest ; it is to make our study of philosophy a set of mental gymnastics instead of the vital progressive thing it should be to us. To leave it out is to leave out of philosophy all that is most human and personal and to make it in truth that 'logic chopping' which it has been derisively dubbed.

'What do the *writings* mean ?'—that question we must answer by the sweat of our brow, for it is 'line upon line, line upon line, precept upon precept, precept

[1] An address delivered before the Philosophical Association, October 13, 1927.

upon precept, here a little and there a little, here a little and there a little.' 'What does the *author* mean?' Not digging here, but the flash of insight. Both are needed—both, I might say, are indispensable to any study of philosophy worth the name. With apologies to Kant for the form of expression, perspiration without inspiration is heaviness; inspiration without perspiration is vanity.

Turning then to this afternoon's subject, let us ask the two questions:

1. What does Hume's 'Treatise on Human Nature' mean?
2. What did David Hume mean by it?

What does the Treatise mean?—even this is more than a problem of vocabulary and syntax. We must give the work its setting before we shall be prepared to read it with understanding. But we are doubtless on familiar ground here. The sketch of pre-Humian philosophy here required is possible within the brief compass of this afternoon's discussion only on the assumption that it is simply a gathering out from the great bundle of familiar detail just those strands needed as the warp of our pattern. My purpose is not to inform you, for I take it you are already full of information regarding early modern philosophy, but merely to call your attention to such items of your information as seem to me to possess most marked significance for our present study.

For any adequate conception of the thinking world in which the bomb of Hume's skepticism burst we must go back to Descartes as our starting point. This is not to concede to him that proud title some have claimed for him of 'Father of modern philosophy'—unless we allow him the comfort of Rabbi ben Ezra's philosophy and yield the title on the score of what he aspired to be and was not. The attempt that Descartes made to throw off the fetters of authority—to think things through for himself—was modern enough; what he actually achieved was no new philosophy but rather the presenting afresh, in a readable and persuasive form, well compacted and ostensibly logical, of what was most alive of the old dogmatism. Even in the act of divesting his mind of specific certainties Descartes failed to put aside his prejudice as to what constituted certainty, and at the end we find even the specific certainties reinstated, all the more prized for their temporary banishment. At first reading, I admit, Descartes captures the imagination. It is a noble and compelling gesture he makes, that of doubting everything. The boldness of it takes one's breath. Closer study, however, tinges one's admiration with suspicion. Is there not something rather suggestive of the charlatan in the way the philosopher recovers with his left hand, as it were, what his right hand has but just discarded? Who can forget the thrill of watching a first sleight-of-hand performance? The performer begs a fine linen handkerchief from some one in the audience and proceeds to snip it to bits—the child watches fascinated. What a daring man! Whatever will the owner say?—the child feels prickly all up and down his spine. But look! the man on the platform is shaking the pieces together in a tube—now with a flirt he draws out the demolished handkerchief, restored to its pristine wholeness and freshness. Marvellous! But the child grows up and his knowledge widens. He may indeed retain his old

interest in sleight-of-hand, he may yet be mystified by the skill of the performer, but he knows it now for skill, not magic. There is no longer any thrill in seeing the handkerchief snipped to bits, no fascination of horror and apprehension,—no not though it be his own best one. He doubts his own eyes rather than the outcome. The handkerchief is not destroyed at all, and well he knows it, however puzzled he may be as to the exact way in which the result and the effect are obtained. So one comes to feel about Descartes' adventure. If not consciously practising deception—and of that I think we must exonerate him—he is surely self-deceived. His universe was never really shaken, let alone destroyed. He emerges from his self imposed doubt bearing aloft all he had taken in with him,—may we not be pardoned for suspecting that he never once really lost his hold upon any of it?

Review then, for a moment, what it was that Descartes brought forth from the clutches of his doubt: First, of course, 'I, the doubter, am,' and under the voluminous mantle of his own existence he smuggles innumerable unproved assumptions regarding the nature and mode of this existence. Second, 'God is,' doubly proved by the necessity for postulating a cause for my idea of God, which, finite as I am, I am obviously incapable of producing, and by the mere existence of this idea with its connotation of perfection—which perfection of course involves existence at the very least. This second, the ontological argument, must be taken, like the medicines with which our grandmothers used to dose us, at a gulp. It is of the essence of scholasticism and compounded with a subtlety of which we with our naïve questionings are 'too young to know'. Third, and last, the external world (the object of my necessary experiences) is, and my perception of it is truly and directly representative. If it were not so, I must suppose that God is deceiving me, and in the light of His omniscience, omnipotence and supreme goodness such an assumption is unthinkable.

Such, in brief, is Descartes' philosophy as he formulated it, and as it stands, it possesses a two-fold interest. It gathers up the best thought of centuries past, and it sets the form of thinking for generations if not for centuries subsequent, for the world in which the average thoughtful man of the next century or two lived was, I take it, substantially the world of the Cartesian philosophy. Even to the present time Cartesian dualism has to a large extent supplied the philosophical vocabulary of 'common sense,' for 'common sense,' so generally supposed to be independent if not positively contemptuous of the findings of the schools, usually proves upon inspection to represent chiefly the precipitate of scholarly thought of an earlier age. No more conventional thinker lives than that hypothetical 'man in the street' to whom we turn for the verdict of common sense, whether in religion, politics or philosophy.

But most important of all, for our present purpose, is Descartes' rehabilitation of the doctrine of innate ideas, not explicitly reformulated by him, to be sure, but implicitly present throughout the whole line of inference from his starting point, *cogito ergo sum* to the final re-establishment of his whole world of intuition and experience.

To Descartes, as to his scholastic predecessors, the idea had its own independent objective existence. Its presence in the mind was hardly more than an accidental circumstance. Certainly the idea was not beholden to the individual mind in which it happened to appear, either for its existence or for its significance. To this the whole discussion regarding the idea of God bears witness. And this notion of ideas seems to have enjoyed general currency until the time of Locke. Bacon with his idols illustrated the proneness of our ideas to error, and Hobbes flouted prevailing ideas of justice and the constitution of the state, setting up in their place explanations that seemed to him more to accord with experience, but Locke was the first to challenge outright the whole notion of innate ideas.

I need hardly remind you of how Locke, brought face to face with the difficulty of getting at the truth of things, conceived that in spite of all tradition to the contrary the epistemological problem might after all prove to be a psychological problem. His own delightful account in the *Epistle to the Reader* in which he introduces the essay *On the Human Understanding* invites frequent rereading. Until Locke thus attempted his investigation of the thought processes, if perchance they might throw light upon the measure of certainty to be attributed to their results, the idea had never been examined in its own habitat. As we have remarked, the question of ideas had been kept singularly remote from the mind in which they reside. From Locke onwards, however, we find the credentials of the idea avowedly sought in the ideational process itself.

Negatively Locke argued that the so-called innate ideas are not innate because they are not universal. Positively he presented a stronger argument in his account of the way in which these supposedly innate ideas originate and develop through experience of the individual. No idea but will yield this same secret of its origin upon close scrutiny. 'Nothing' he concludes 'is in the intellect which was not in the senses.' Analysis of mental content provides him two sources of ideas, sensation and reflection. As passive recipient of sensations the mind is like a mirror—it can neither reject nor modify its impressions. As actively engaged in reflection it operates upon the given sense material, combining and rearranging, forming complex ideas from simple elements, weaving into the tissue of the whole its awareness of its own activity, but creating nothing and possessed of nothing not received through direct individual experience.

So Locke announces his platform of empiricism, but he is curiously blind to its implications. His universe remains substantially the universe of the Cartesian philosophy. Descartes' doctrines of a self intuitively discerned, of a God demonstrable through principles revealed in this intuitive knowledge of the self, and of a real external world, basis of sense experience and at least in part representatively reproduced in experience, remain for the time unshaken. And yet in distinguishing between primary qualities which inhere in the very nature of the external world—or its 'physical substratum'—and secondary qualities, which are subjective and tracable rather to the nature or condition of the observing mind, Locke is unwittingly undermining both physical substratum and observing mind.

For a time Locke's readers remained as placidly unaware of the destructive tendency of the principles he enumerated as Locke himself had been. His philosophical work attained rapid and wide-reaching popularity as a sound and skilful exposition of the philosophy of common sense, but when the intrepid Berkeley tried to show that the common sense to which Locke had appealed would take one much further than Locke had gone, when he declared that common sense could have no use for a physical substratum not itself directly perceived (and had not Locke himself taught that those qualities directly perceived are for the most part secondary—subjective?) he brought down upon himself distrust and ridicule. In vain he pointed out the unknowable and hence unusable nature of substance. In vain he urged that all of reality experienced by anyone was admitted by him to be real! In vain he challenged anyone to show that he was robbing the man of common sense of anything which men of common sense had ever possessed or could ever possess! So much more hazardous is it to tamper with labels held precious through long association than to undermine the very foundation of the goods to which the labels applied—to launch against them principles ever so explosive, so long as these are wrapped in conventional language.

For Berkeley, then, the material side of the Cartesian dualism vanishes. In its place he puts an ideal world no less real and no less objective, so far as the individual human observer is concerned, a world of experience directly imposed upon the finite mind by the infinite mind. That both finite and infinite mind exist as active entelechies Berkeley makes no doubt—they are to him intuitive certainties,—and so, with Locke, he claims more in his constructive philosophy than is warranted by his critical dicta—an inconsistency but thinly veiled by his recourse to the term *notion* applied to ideas which creep in by devious unorthodox ways.

In view of the background we have sketched in, let us go back to our first question, 'What does the philosophical writing of Hume mean?' Primarily, it seems to me, it means the facing squarely and fully for the first time of all that was implicit in Locke's theory of ideas. Locke, as we have seen, utterly failed to recognize how his epistemology must revolutionize the cosmology he so uncritically accepted. Berkeley with all the genius he displayed in his exposure of the impotence of the old category of material substance could not—or would not—see that the same weakness beset his own category of spiritual substance. Neither of these earlier empiricists realized that in the categories they retained the flouted concept of innate ideas still found sanctuary. A little consideration will convince one, however, that the physical substratum of Locke, and no less Berkeley's 'notions' of spirits clearly involve the retention of that principle of innate ideas which both had overtly repudiated. Descartes is not without company in admitting by the back door guests dismissed from the front. Hume drives the innate idea from its last covert, and shows us how far he must go who throws in his lot with the atomistic type of empiricism launched by Locke.

Hume begins where Locke begins with an analysis of mental content, and he analyzes in much the same way, except that he is if possible more methodical and goes into greater detail. Especially is this true when it comes to showing

how complex ideas are derived from simple ideas, which in turn have their origin in sense experience. It will perhaps be worth while to pause for a somewhat more careful scrutiny of his methods and its results:

Part I Book I of the Treatise deals, with 'ideas, their origin, composition, connection, abstraction, etc.,' in a manner so logical and orderly as to have almost the effect of a chart, the salient features of which may be swept at a glance. Perceptions, under which blanket term Hume comprehends the sum total of mental content, fall primarily into two groups, viz., impressions and ideas, both groups subject to cross division on the basis of simplicity or complexity, and again on the basis of source, whether in sensation or reflection. Impressions, of course, precede ideas of like order, and afford the sole foundation and import of those ideas. To trace the whole process of ideation genetically we begin with sense impressions which give rise to ideas of sensation. These in turn bring into operation impressions of reflection which yield ideas of reflection. So far we are dealing with simple perceptions in our schematic arrangement; actually the process involves more or less complexity almost from the first. This complexity is due to the tendency of the mind to combine, abstract and recombine, ideas operating in two characteristic ways which we commonly designate as memory and imagination. The significant characteristic of memory is not the mere retention of simple ideas, but the preservation of order and position. The signal trait of imagination is the liberty displayed in the alteration and transposition of ideas, which may be so striking as to give an effect, at times, of the creation of new material.

In all the production of complex ideas, whether of memory or imagination, there operates the 'gentle force' of association which arises from certain qualities in the simple ideas, conspicuously the qualities of resemblance, contiguity and causation. Just how much,—and how little, he means by that last term the author fully explains later in the book. Through association emerge those ideas of relation, mode and substance, which less critical thinkers had held to be innate because their origin had not been exposed. Through combination and abstraction it is possible, Hume teaches, to run the whole gamut of ideas without assuming any material or rationale beyond that furnished through specific individual impressions. Relation, in the last analysis, is nothing but contiguity of one sort or another. Modes and substances are but collections of simple ideas united under a particular name which serves us as a mnemonic. Abstract ideas are simply the taking of a part for the whole, as may be seen from the representative potentiality of all abstract ideas.

There are, however, two abstract ideas—those of space and time—which are so fundamental to the conventional way of thinking that Hume devotes the whole of the second part to their consideration and to an exposing of the fallacies which have beset reasoning about them. It is not necessary to review the steps of Hume's argument from the paradoxes presented by any substantive notion of space or time, nor his constructive explanation of the way in which it becomes possible for us to argue about the nomenclature of time and space as though we had real

ideas corresponding thereto. The statements in which he sums up the matter speak for themselves. 'Time' he declares, 'is nothing but the manner in which some real objects exist.' 'The idea of space or extension is nothing but the idea of visible or tangible points distributed in a certain order.'

But to deny space is to deny externality to the objects of our experience—even Berkeley had not gone as far as this, for all his theory of vision and his repudiation of material substance. Hume, however does not flinch from a forthright statement of all that his doctrines involve. We find the first aspect of his skepticism clearly enunciated at the end of this consideration of time and space. 'Let us fix our attention out of ourselves as much as possible; let us chase our imaginations to the heavens or to the utmost limits of the universe; we never really advance a step beyond ourselves, nor can we conceive any kind of existence but those perceptions which have appeared in that narrow compass.' Thus decisively is the world of our experience denied not only corporeality but externality or objectivity of any sort.

Even so the mind might make shift to be its own world, but Hume's references to the mind in the earlier part of the book are misleading, as it gradually appears through the latter part. He has found it convenient to borrow common phraseology, and speaks from time to time of 'impressions present with the mind,' of 'the mind's conception', of the 'image in the mind' etc. A rereading of the book reveals the fact that such references are surprisingly infrequent, but where they occur they naturally carry to our minds all the usual connotation, and we carry this connotation over even into the more carefully guarded passages. The result is that we take it for granted that Hume is ready to support the common view of the mind, but another disillusionment is awaiting us. When Hume has disposed of innate ideas, of time and space and of externality of objects of experience, putting everything within the self, labelling as subjective even the hitherto unchallenged notion of causation, he turns at last upon the self. In my country we say in trying to express a particularly humiliated or doleful frame of mind—'I would like to crawl into a hole and pull the hole in after me.' Hume seems to have accomplished just this. 'We now proceed' he says, 'to explain the nature of personal identity', and continues, 'the identity which we ascribe to the mind of man is only a fictitious one. . . .' It is a far cry from Locke's position to this, and yet this is nothing more than the full logical outworking of the principles for which Locke contended. There is no earlier stopping place.

What do the writings of Hume mean? No less than this, that an epistemology which builds up its belief from the discrete atoms it supposes to be the ultimate units of human experience can never prove its right to believe in a universe at all, can never, without abandoning its own premises, discover either objective reality or subjective coherence in all its field of exploration.

And the second question, 'What did Hume mean?' Ah that *is* another question, and with your pardon it is a question I do not propose to attempt answering for you. If you care to take the trouble to hunt them out you will find

almost as many different answers as you will commentators. You will find the search interesting but inconclusive. Calkins asserts that Hume's teaching is above all negative, Lindsay makes the counter assertion that Hume's actual work was not merely skeptical. While some critics are mooting the question as to whether Hume meant to be constructive or destructive there are others who stand aloof and say with the Irishman, 'Bedad and its nayther,' declaring that both sides have erred in taking ontologically what was never meant as other than a mere epistemological exercise, with a view neither to tearing down nor building up ultimate realities but simply to display the limits of demonstrability. If you are to find a satisfactory answer, an answer which will satisfy yourself, I mean, it will have to be your own and even then there is no assurance that it will continue to satisfy you. It has been said that a sense of humour and a sense of proportion are kindred traits. I am not sure that a sense of humour may not be needed for a fair appraisal of Hume's intention. The last chapter of the first book of the Treatise purports to give us Hume's own answer as to his personal attitude towards his conclusions, but the pathos is overdrawn—there is a touch of the melodramatic—is it barely possible that the author is 'pulling our leg'?

I fear that at the beginning of this discussion I gave you reason to anticipate that when we had disposed of these two questions I would have done. I beg your forbearance while I call your attention to a third question of such vital importance that it must have a hearing—the question: 'What does Hume's philosophy mean for us, now'—not merely for us as students of philosophy and candidates for degrees but for us as thinking humans interested in the implications of our own experience and eager to determine our own criteria of belief.

Rationalism seems a washout—at least the old rationalism. British Empiricism has done for it. We cannot go back to the innate ideas as they were, any more than we can go back to the lost illusions of childhood. We can talk about them—we can juggle with them still, but real belief in them is no longer even a 'live option' to use a phrase of our American psychologist-philosopher, William James. British Empiricism has done its work too thoroughly—thinking men cannot go back to the old uncritical confidence in the human reason and its capacity for drawing the content of reality from its own inner consciousness. As Royce with characteristic insight declares in *The Spirit of Modern Philosophy*, 'Philosophical insight however partial is never to be refuted'—and in the skepticism in which empiricism culminated in Hume there is unquestionably a philosophical insight which pierces below the flimsy garment of any conventional rationalism.

Empiricism, on the other hand, has hardly fared better at the hands of David Hume. His philosophy has been styled with apparent justice 'the *reductio ad absurdum* of the empirical method.' One is reminded of the story of a stranger who came to a cross road corner and inquired of a man he met which road he had better take. 'Waal, stranger,' said the man, 'those roads both take you to the same place but if you take the right hand road you'll wish you'd died first, and if you take the left hand road you'll wish you'd taken the righthand

road.' Hume carries us along his road of empiricism through disillusioning us regarding the rational road, but we seem to have gained nothing by the exchange.

Must we then in all seriousness accept Hume's declaration that 'we have therefore no choice left, but betwixt a false reason and none at all.' Here in its tersest form is the dilemma which confronts us in the counter-claims and counter-charges of rationalism and empiricism—rationalism false reason, empiricism none at all, in the estimation of Hume. Are we to accept the dilemma as final and admit with Hume that the best we can do is to find respite in ignoring and forgetting it so far as possible? Or shall we be warned by the very dilemmatic form of the conclusion that fallacy lurks in the seeming simplicity of the issue—that there are probably forgotten aspects if not a neglected universe?

The dilemma needs to be taken by the horns—to be attacked from both sides, for however valuable the destructive work of Hume he has not done justice either to reason or to experience. Of the attack on the rationalistic horn I shall say little. That attack was already begun even before the time of Hume when Leibniz countered Locke's *nihil est in intellectu quod non in sensu fuerit* with the very pertinent insertion *nisi intellectus fuit*. Kant, awakened from his dogmatic slumbers by Hume, went on with the good work, for they read ill the critical philosophy who consider the 'Critique of Practical Reason' a weak retraction of the bold thought of earlier years by a man growing old and cautiously politic. For those who are willing to see it the whole of Kant's earlier work leads unerringly up to this new foothold he finds for human reason.

The attack upon the empirical horn has been more neglected, and it has been left to our own times when psychology has come to the succour of her mother, philosophy—when, in fact, the scientific point of view in general has reacted upon the assumptions of philosophy—to make the most of the possibilities in this second line of attack. The most cogent answer to-day to Hume's demonstration that empiricism will not work—or at least will give no constructive results—is that real empiricism was never tried, either by Hume's predecessors or himself. The platform and method of the empiricist are avowedly to take experience as we find it, upon its own merits, and without prejudice to try it out for whatever it may yield in knowledge of the nature of reality, but this none of the so-called British Empiricists ever did. Their unit of experience, the idea or impression, is patently an abstraction, not a raw element of experience but the scoured and polished product of a mental process of elimination operating upon the rough material of experience and incidentally discarding as waste, with no commercial value, just that which constitutes the material as personal experience. We must not lose sight of the fact that all experience is personal experience. The idea or impression is not—cannot be—merely as such, in the abstract, experience—or even experience material. Psychologists have long recognized this. Even sensation is an abstraction—as anyone who has ever tried in a psychological experiment to segregate and describe a bare sensation will readily recognize. The lowest real unit of experience involves an experiencing subject in his world—

any attempt to reduce to lower terms inevitably results in an artificial over simplification where simplicity is bought at the expense of reality.

Hume was right when he showed that starting from the bare idea we can never arrive either at an external world or at an internal unity or continuity of experiencing subject. Doubtless we needed to be shown, but having once seen it we wonder how we could have helped foreseeing it from the first, for certainly it was implicit from the beginning. But for that very reason Humian agnosticism is not only, as Hume himself recognized, no final refutation of the existence of either external world or internal unity of observing subject, but it is not even a final objection to the empirical method. Empiricism must stand or fall by fairer tests than this, for surely it is not fair to claim significance for the absence, in the last analysis, of certain elements when the very method of analysis employed has automatically eliminated the elements; neither is it fair to declare *a priori* that analysis can proceed along no other lines.

But it is one thing to criticize Hume's arguments, or his basis of argument, and it is quite another to disprove his conclusions. From a purely philosophical point of view Hume's final position appears an impregnable one. Take whatever line of constructive argument we may, we find our arguments resting ultimately upon those fundamental assumptions of induction which we have been taught to sum up under the rubrics of 'uniformity' and 'causation.' But if a philosopher choose to deny that there is any such thing as uniformity, and if he choose to explain causation as a subjective category of belief rather than as an objective category of existence, who is to deny him his right to do so?

The skepticism of Hume is no longer a live issue, not because we have found any logically valid disproof of his conclusions but because the center of our interest has shifted. When all is said and done, we are bound to admit that the norm of philosophic plausibility has always been a matter of interest and control. Truth is the unknown, the value of which we seek through all the equations of our experience and reflection. It is accordingly obvious that truth in the abstract cannot be our norm in any practical sense. We must steer by something concrete and apprehensible, and so we do. Pure reason leads us, as Kant shows, into paralogisms mutually exclusive yet equally acceptible from a purely logical point of view. Since they are contradictories, logic would teach us that while both cannot be true one must—yet logic affords no criterion whereby one may be selected to the exclusion of the other. They hold each other in a condition of undisturbed equilibrium. But a perfect equilibrium of uncertainty is the one thing the human mind will not brook. If pure reason cannot break the balance it must be broken by some less rational factor in our make-up. And so it has come about that the interests, the outlook, the practical exigencies of any given period have always had a share in determining the philosophic expression of that period.

At present the western world almost *en bloc* and an increasing proportion of the orient is committed to the scientific point of view. The assumptions of science give us our leverage upon our world as we find it, and scientific discoveries are giving us increasing control. The current of interest has flowed past, leaving

the skepticism of Hume in a quiet backwater where it does not even stir up opposition.

So much, then, for the philosophy of Hume and his exposure of British empiricism. So much for our appraisal of that empiricism as not sufficiently empirical, and the belief that empiricism yet lives though in new guise in the scientific thought of our own day. In conclusion let me suggest that this study has its modern bearing, for contemporary empiricism tends to make the same mistake as Locke and his followers fell into, and is in danger of meeting the same fate as their philosophy met.

Without question, the splitting off of the several sciences from philosophy, under whose aegis they had their beginnings, and the specialization and division of labour which have been brought about within the sciences themselves have incalculably advanced our specific knowledge regarding various aspects of the universe in which we live and our control of its forces. But philosophy has not thereby lost its occupation. This point will bear emphasizing, for any science must look beyond its own confines both for its basic assumptions and for the ultimate interpretation of its findings. No branch of science can be self contained in its significance—every scientific discovery involves implications which reach out beyond the immediate field of the discovery. It is equally true that no science possesses in itself all the clues to the significance of its discoveries, even for itself. Scientists are in danger of forgetting, and it should be one of the tasks of philosophy to remind them, that the very conditions of their efficiency within their several fields of investigation constitute at the same time definite limits to the scope of the discoveries they are in a position to make, and the extent of the relationships between this and other aspects of the universe which they are in a position to reveal. Please do not misunderstand me, nothing is further from my thought than to suggest that the physicist, the chemist, the naturalist have no right to speculate upon the broader nature and meanings of the universe—it is the weakness and the poverty of philosophy that her speculations have so often been spun out of the moonshine of some 'inner consciousness' without knowledge of or interest in those concrete manifestations of our universe which are strewn about us. My point is rather this, that when the physicist or the naturalist does turn his attention farther afield in an attempt at constructive speculation about the universe at large he is in so far a philosopher, not a scientist as such, and though he may and should bring to bear upon the problem all the positive data he commands as scientist, he has no right to dogmatize from the absence of the things he has not discovered.

We have already remarked that it is not fair to claim any significance for the absence, in the final analysis, of elements which the very method of analysis employed has automatically excluded. We do well to reiterate it in connection with the new empiricism of modern scientific research, for there is a tendency in many quarters to deny existence to whatever eludes discovery through certain definitely prescribed and narrowly restricted methods of scientific analysis. The tendency is displayed in well-nigh endless variety, for each science has its own

laboratory methods, its own conditions of experiment and its own limited range of valid data—correspondingly each has its fixed limits as to the type of facts it is fitted to discover and the type of principles it has authority to enunciate, but this is not so well recognized. As between the exact sciences the limits are generally observed. A physicist *qua* physicist would hardly presume to air his skepticism regarding metabolism because, forsooth, he fails to find it operating in the wooden furniture of his laboratory or in the cork dust he is using in certain sound experiments. But when we come to the more abstruse problems and the more elusive phenomena of human personality, of social relationships—of the spiritual realm in general we come full upon this characteristic weakness of empiricism the failure to be honestly and thoroughly empirical.

A professor under whom I studied several years ago remarked to his class in neurology: 'Young ladies and gentlemen, we have traced the nerve impulse from its inception from the external stimulus to the reaction. We have noted its course through the neurones and across the synapses. In the whole process I see no need and no room for the intervention of a human will.'

In like manner, and on similar grounds, not a few thinkers of our own day are ignoring the presence of values in their analysis of biological and social phenomena. They arbitrarily abstract their units, without reference to the setting in which they find them and then declare that they cannot by any collocation or combination of these units come upon the values of which the humanists prate—therefore there are no such things!—and we are but too prone to be overawed by the very name science and to feel that there is something a bit weak and shameful in our reluctance to give up convictions we find thus flouted when the more scientific attitude would be to inquire by what right these denial, are made. Did the investigator meet the requirements of the realm which he purported to explore—did he fulfil the conditions of the experiment?

One thing at least we should learn from the *reductio ad absurdum* of British empiricism at the hands of Hume, viz., that if empiricism is to play a constructive part in our understanding of the universe it must be empirical enough to take into account the whole of experience, not dessicated atoms, but comprehensive cross-sections. Nothing less than the experiencing subject in his world can serve as the irreducible minimum from which it is possible to start upon a truly empirical investigation.

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MADRAS

The Moral Issues of Modern Society

One of the most encouraging signs in modern thought is the growing tendency on the part of thinkers to criticize the modern structure of our economic life. Men and women are beginning to face the hard facts of the world around them, and seeing there, misery and suffering arising from inequality they are asking pertinent questions concerning the necessity of it all. Such questioning has almost invariably brought the conclusion reached by a modern writer that 'the sin of the world begins over this business of bread-getting'. At all times, and in all places, men have made bread-winning their chief concern, and it has always been taken as a matter of course—as merely a question of toil and of wages due to that toil. It is only when the ethical consciousness of an individual, or class of individuals, has become acute, that it has been felt that any moral issue is involved. A philanthropist or two, here and there, have called attention from time to time to abuses, but the eyes of the nation at large were not opened, until the size of the evil made it a menace. In the same way the disproportion of the capitalist's profits to the worker's earnings did not thrust itself upon the national mind before the vague fear of 'Labour' spread among the well-to-do.

When really awakened, the interest is mostly genuine. A man moved for the first time by his inability to procure some commodity he desires, because the makers of that commodity are on strike, may begin to reflect on the conditions of those workers, and may even be genuinely anxious for their welfare, but his imagination was dormant until a crisis shocked it into action. However there is a concensus of opinion to-day that the conscience of the best men of all classes acknowledges that a man *is* his brother's keeper, and in all forms of social welfare greater activity is being shown than has been known for centuries.

Nevertheless there is among the benevolent much vague thinking, and there is need for some guidance to be given to men on these questions, so that definiteness and coherence may be the result, and the merely sentimental may be swept away and essentials emphasized. Approaching the problem thus, the main features of that enormous development of industry and commerce, dignified by the title of The Industrial Revolution, seem to be divisible into four parts. First there is the massing of capital, and secondly the massing of population, and then thirdly the struggle between capital and labour and lastly a grouping of international and national aspects of this system of industrialism, which have accentuated the difficulties created by the first three parts of the problem. It may be well to state here that no ultimate good seems possible of accomplishment by condemning out of hand either the capitalists on the one side, or the labour-leaders on the other. Both employers and men are equally victims of the system under which they work, and both sides of the struggle produce good and bad men in almost equal numbers. We can however examine very critically these four aspects of the problem.

No one will dispute now-a-days that capital is now the greatest power in the world. As one writer has stated the proposition, 'wealth is an undoubted source of power, and an enquiry into the distribution of wealth is really an enquiry into the distribution of power'. Unfortunately this wealth, and hence the power is vested in a very small class, and as Lecky says 'there is no instance on record of any class possessing power without abusing it'. Again it is a well-known truism that capital has an evil power of tyrannizing over its owner, so that he lives for good balance sheets, cheaper production and ever widening markets. Life to such a man becomes a fight against interests that must be opposed and destroyed, not that the community may benefit thereby, but that he and more especially his business, may triumph over all competitors. Now-a-days we are witnessing the inevitable consequence of this in the combinations and massing of capital in great units, so that the fighting strength of a particular type of capital may be increased for greater conflict. So we find Trusts and Cartels controlling the production and distribution of the necessities of life, and the last thing to be considered seems to be the good of the community. With great truth did a great industrialist say the other day, 'There is a perpetual war being waged in industry,' and it is quite as immoral or a moral as was the Great War itself.

Such a condition as this will necessarily lead to a disregard for the welfare of the workers, and so the abominable housing conditions of our big cities revolt the senses, so much so that it has come to be regarded as something approaching bad form to discuss them in well-to-do society. One is reminded here of the words of the cynical French philosopher, who said to a friend, 'Let us think about these things, but do not let us speak of them'. We pretend not to notice these earthly hells, to which we condemn our less fortunate brothers and sisters, and so the evil grows.

The housing conditions in Madras, Bombay and Calcutta shriek to heaven for redress, and their health reports with the stories of cholera, plague and small-pox are terrible commentaries on the introduction of industrialism into India. The recent sermon preached in the Cathedral, Calcutta is a voice crying in the wilderness concerning these evils, and the letters in the press afterwards were an enlightenment upon the mind of business-men, who can defend a system which produces such results. We declare sententiously that the home is the basis of national life, and then condemn, by our industrial system, the workers in our factories to live in hovels not fit for animals to inhabit. To speak of 'home' in such surroundings is to cast a great strain on the influence and work of the mother, who is compelled by circumstances to create a home from such unpromising material. For millions of our brothers and sisters in India, home life has been made almost impossible by the housing conditions of our large cities. The high rate of infantile mortality and maternity-deaths, the presence of innumerable liquor shops and unemployment all combine, with lack of housing facilities, to produce slums and poverty.

Arising out of this, another feature of the problem confronts men. The growth of large towns, mostly around industries and smoky chimney stacks, has separated the classes. The quarters of the rich and poor become more distant

from each other every year, and every large city presents sharp divisions of classes and districts. In most Indian cities the wealthy have left their more unfortunate fellows to the horrors of congested, disease-ridden, and filthy slumdom, and in their lovely suburban bungalows they forget the facts of this problem, while they eat their expensive dinners, and sleep on their comfortable beds. The contrast is accepted as being quite in the nature of things. The questions of the conflict between capital and labour and the national and international aspects of this problem of industrialism need a treatment more thorough than has been given above to the first two points, and probably the best way to do this would be to analyze the philosophy of our modern social structure.

Industrial strife is too often treated as merely an individual problem—'If only the men had a better spirit'; but that is only to express the problem in other terms and not to solve it. To insist on the necessity of a 'change of heart' is often to neglect the necessity for a 'change of system,' and that is as wrong a conclusion as the opposite one maintained by the materialist communist. He maintains that what determines changes in human thought, and spirit is the system of production obtaining at a given time. While that view is one sided and materialistic, it contains a truth often ignored by others. In dealing with the social structure we are dealing with something which has significance for the spiritual, moral and material nature of man. It has power to impede human development, and to make the highest life difficult if not impossible. There are many people therefore who feel that though there are other causes, the root structural cause of industrial strife is in ownership. It is maintained that ownership means a control, which is a denial of personality, and that life has only progressed so far as that control has been limited, and that such control can never be really eliminated until private ownership is eliminated. That proposition needs to be examined.

To-day society conceives that the right to the free disposal of property and exploitation of economic opportunities is absolute, and takes up arms against any attempt to limit this right by attaching to it any further conditions. The idea that any enterprise must be subordinated to a social purpose first and foremost, and that all other considerations must take a secondary place, seems to our directors of industry to be a very dangerous doctrine. They see that once this doctrine is accepted, then all property and economic activity will be turned from rights that are absolute to rights that are relative to certain functions to be performed, and may be revoked quite justly when those functions are not performed. It implies that property and economic activity exist to promote the ends of society, and cannot be allowed to be used for the enrichment of the individual at the expense of society. So, since these industrial magnates have attained their position in society by their success in making industry contribute to their own wealth, this reversal of what they consider to be means and ends, seems little less than revolutionary. Nevertheless they must be made to justify, before a social tribunal, the rights they have hitherto taken for granted as part of an order above criticism.

It was the *laissez-faire* doctrine of the ninteenth century that stated the supposed inevitable harmony between private interests and the public good, which laid the foundations of this present industrialism. The doctrine has now been conclusively discredited, but the disposition to regard individual rights as the centre and pivot of social organization remains as the practical foundation of our industrial organization to-day. The natural corollary of such a proposition is that economic rights are independent of economic functions, and need no higher credentials than their own virtue, and so we find on every hand economic rights being enjoyed irrespective of whether economic functions are being performed or not. To-day this pernicious system is being strengthened by a determination in society to organize against any and every attempt to extinguish payments made not for service rendered, but because the owners of certain economic rights possess the legal right to extract these payments without such services.

A fuuctional society would make the accumulation of wealth contingent upon the discharge of certain social obligations, and would proportion remuneration to service, and deny it to all those by whom no service was performed. In this way since no one person can perform more than a limited amount of service for the community, no one person could receive more than a certain remuneration, which would not be more than was necessary for the needs of a person performing that particular service. The old formula enunciated by Bentham that the function of society is 'the greatest happiness of the greatest number' is now somewhat out of date, for it implies that social institutions have no common end at all. The happiness of the individual is the only real happiness possible, and to make happiness the object of society is to resolve society into the ambitions of numberless individuals, each directed towards the attainment of some personal purpose. Such a society gives a man free scope to use his powers not for the fulfilment of social obligations, but for the exercise of the right to pursue his own self-interest.' To the strong it offers unfettered freedom for the exercise of strength, and to the weak the hope that they also may be strong some day, and it assures all men that there is no law other than their desires. The only corrective to excess, defect, waste or superfluity is a mysterious, automatic and mechanical play of some so-called economic forces, which men imagine are at work.

From such a system as this there must necessarily arise problems of inequality, because, since rewards are divorced from services, and riches alone are the prizes to be won, two obvious results follow. The first is the creation of a class of pensioners upon industry, taking their subsistence, and more, out of industry, and contributing in return nothing at all, and since the possession of wealth is the only index of social worth used by society, these pensioners receive the greatest admiration from the crowd. So long as incomes remain not differentiated as incomes from services, and incomes without services, this must continue to be the case, and India must continue to support this class of drones living in their mansions, with huge retinues, on the proceeds of their extensive landed properties probably miles away trom their absentee owners. The evil is accentuated because the middle class, on lower incomes, are always eager to imitate their more

wealthy compatriots, and this idle worthless and unproductive existence is exalted into the ideal to be aimed for. The second result of this system is the degradation of those who labour for little reward. Again it is possession of wealth that determines honour due to a person, and these workers, possessing no wealth and in many cases living from hand to mouth, are without honour. In a truly functional society, industry alone would be honourable, because only they who labour, serve the community, and the fruit of hand and brain would receive the due recompense due to it. But as soon as the criterion of function is forgotten, the only other criterion remaining is the possession of material goods, and to this we pay our reverence, the reverence really due to the arts of craftsmanship in the humblest and most laborions artisan. In this attitude of mind is born the idea that they who labour without wealth, and they are the great mass of mankind, are vulgar, meaningless, and insignificant in comparison with those, who acquire wealth by good fortune of birth, or cunning use of economic opportunities. No man is really paid in happiness, who must count his reward in mere material things, and probably the greatest unhappiness of the worker is found in his loss of the esteem of his fellowmen, for though he is the builder and maintainer of our civilized state, he is the least esteemed of all men. It is the shame of our modern society that we admire those who get, rather than those who give, irrespective of how the getting has been carried out, and at what cost of human life and happiness. And the irony is that they who give much in life and energy, get so little. India to-day owes a great debt to her millions of 'sons of Martha,' who have made life so luxurious and easy for the comparatively few 'sons of Mary,' who, 'toil not neither do they spin.'

Such inequality as this system engenders can be remedied only by recognizing some principle for the limitation of gains from industry. Gains from certain sources, or exceeding certain amounts must be regarded as illegitimate, and privilege springing from unequal opportunities due to birth, inherited wealth and the apparatus of class institutions must be abolished. Another evil arising from this inequality is the misdirection of production into wasteful channels, due to the bigger pull of larger incomes over smaller ones. India to-day sadly needs irrigation works, good roads, and houses for its urban workers, and yet the labour and wealth which might be used for these useful purposes is to a large extent being used for the upkeep of huge retinues of servants, for building stately mansions for rich men, and for doing the thousand and one things necessary to pander to the luxurious tastes of the unproductive minority. This labour is producing not wealth but waste, because the national income includes things which ought not to have been produced until things more urgently needed had been supplied, or perhaps ought never to have been produced at all. However no remedy will be possible until we can recognize the idea of purpose in our social arrangements, and social activity, for to recognize purpose is to recognize a principle superior to the mechanical play of economic forces, which will determine the relative importance of different occupations. Without such principle of purpose our social life is turned into an arena of fierce conflicts disguised, but

thinly, for most of the time, and breaking out at intervals into strikes and lock-outs. It is useless to imagine that economic peace can be secured merely by tact and forbearance and round-table conferences, for such reasoning is founded upon the idea that there is a fundamental identity of interest between different groups engaged in industry, which is regrettably interrupted by misunderstandings. Rather are these interruptions, if such they can be called, due to a better understanding of the interests of the respective groups by the units forming those groups. The fundamental idea that makes such war possible is the conception of industry, which makes functionless incomes permanent, and industrial warfare is the inevitable result of such conception. The reason for this is that such a conception teaches that individuals and groups have a perfect right to whatever they can get, and denies that there is any superior principle, higher than the mechanism of the market to determine what they *ought to* get. This superior principle must be the principle of function, for otherwise nothing remains but self assertion, with all its disastrous results.

The principle that remuneration must be based on service abolishes from modern industry the idea that each has an unlimited right to exploit economic opportunities as fully as he pleases, and incidentally removes the true cause of industrial warfare. That cause is as simple as the true cause of international warfare in that, since men to-day recognize no law superior to their desires, they must fight when those desires collide. Efforts to erect a superior principle in international matters, as the League of Nations is trying to do, must find their counterpart in the industrial life of the nations, and that superior principle is function. It is however useless to imagine that the difficulty can even be met by high wages, for it is not a question of amounts that stands in our way, but one of proportions. So long as the great inequality of opportunity and income we see to-day persists, so will the warfare exist. A man can fight for Rs 20 a day just as readily as he can fight for Re 1 per day, so long as he sees that the profits of the enterprise yield dividends of 20 per cent and 30 per cent to absentee shareholders. When every superfluous charge has been removed from the enterprise, and wages bear some relationship more closely approximating to profits, then the workers cannot demand higher wages, as they would then be encroaching upon the livelihood of others. But as it is at present the mere fact that industry is paying something to those who do not work in any way at all, argues that it can afford to pay more to those who do. 'So long as wealth is not proportioned to function, but belongs to those who can get it, men will never be satisfied short of infinity.'

This leads up to one still more important aspect of the question, namely the effect of industrialism upon our national thinking and action. Unfortunately this philosophy of our industrial life has taken charge of our politics, our culture, and even our religion. What militarism did for Germany in pre-war days, the industrialism of the nineteenth century has done for our economic life, though just as the possession of an army by a state need not necessarily make that state militarist, so the use of machines and other economic developments need not necessarily make a state industrialist. It is quite possible to avoid the evils of

industrialism so long as men use the machines, and the peril comes only when men allow the machines to use them. When industry is elevated to a place of supreme importance, so that all other activities of the state are measured by its standards, then the state and its members have sold their souls to industrialism. Let a few examples from modern life illustrate this point. Just when this economic doctrine was gaining ground in Europe, Warren Hastings wrote home in 1772, from India, that a great famine had raged for a whole year throughout the Provinces, 'but its influence on the revenue has yet been unnoticed, and even unfelt, *except by those from whom it is collected.*' He then goes on to state that the revenue had actually increased during this period, and giving figures to prove this, remarks that 'it was naturally to be expected that the diminution of the revenue should have kept an equal pace with the other consequences of so great a calamity. That it did not, was owing to its being violently kept up to its former standard.' There we have the industrialist spirit well illustrated, in that more revenue than ever is exacted from a famine-stricken population (of whom more than a third, or ten million souls, had just perished). Rev. C. F. Andrews, in his *Christ and Labour*, gives more modern examples of the same spirit in South Africa and Fiji. Though slavery has long been illegal, the indenture system with its five years servitude on the sugar plantations produced results, which Mr. Andrews said he witnessed, and which were quite as bad as the conditions during the worst days of slavery. Under the Government of India Regulation worse things than slavery were produced in Fiji, for the Regulation, callous in its laxity, sent only thirty-three to forty women with every hundred men shipped to the plantations there. These people, swept as they were from quiet village homes into the strange surroundings of the 'lines' in the mill centres, met with moral disaster. The 'lines' became synonymous with prostitution, and men were obliged to take their wives from the 'lines' to protect them from contamination. Here is industrialism rampant and even moral interests were sacrificed to money interests in this labour importation from India. Mr. Andrews however does not base his indictment solely on these facts, but describes conditions here in India itself in our industrial centres, that are not a whit less terrible. One example will suffice from his list, and that is our own Perambur, in the days of the great strike some years ago. There he found an overcrowded community, with the men outnumbering the women by more than three to one, and one man, found tramping six miles to work every morning and six miles back every night, gave as his reason for doing this that he dare not bring his wife into such surroundings. 'It was not "safe"', he said. This can be multiplied in India by the score, and it is part of the price we are paying to industrialism for having sold our souls to this system. The words of the Christ seem very apposite here in answer to those people, who boast of the industrialisation of India, and the future before her in this connection. 'What shall it profit a man if he gain the whole world and lose his own soul, or what shall a man give in exchange for his soul.'

Apart from the direct industrial examples of this pernicious philosophy, the effect on our political life in India is also terrible. The fact that the Indian

Government continues to enrich itself with the profits of an opium monopoly, which has been proved to the hilt to be used for little less than the debauching of human lives, is a patent example of how industrialism can capture politics. Not less awful is the policy of the Provincial Governments, which refuse to consider the lessening of the drink problem, because the revenue derived from the sale of these liquors forms such a substantial portion of the total revenue of each province. Nor are our local-government bodies less free from the taint of this inversion of means and ends, forgetting that the purpose of industry and its revenues is the social betterment of man. It is the confusion of one minor department of life with life itself, when industrialist standards are used to measure all things, and men forget that it is the social purpose of industry which gives it any meaning at all, and makes it worth while carrying it on.

So it is, that as the perversion of nationalism is imperialism, the perversion of individualism is industrialism, and the perversion in each case demonstrates the defectiveness of the principle, the defects becoming more evident as the principle becomes more powerful. Conflict of desires arising from the principle of industrialism brings, as we see in our modern society, social warfare in all its ramifications, and peace can come only by surrendering all claims to an unfettered exercise of rights on the part of the individual or group. The individual has no absolute rights, as they are relative to the function which he must perform as a member of the community, to which he belongs. All rights are conditional on being used to the attainment of that functional end, and so for society to be healthy, men must regard themselves not as owners of rights, but as trustees for the discharge of certain functions, and the instruments of a social purpose. Bacon's spirit is the sane one, that the work of man ought to be carried on 'for the glory of God and the relief of men's estate.' Such a spirit bases remuneration not on what men can snatch for themselves, nor on what, if unlucky, they can be induced to accept as a minimum reward, but upon what is appropriate to their function. Then those who perform no function would receive no payment, and those who give service to the common end would receive an honourable payment for an honourable service. Then would a change be made possible in the prevalent conceptions of economic activity and property and industry would become a *social* service, rather than a private enterprise in which the interest of the community is merely indirect.

And how does it all work out? Are there not some definite concrete suggestions, which it is possible to make along the lines of this principle of functional purpose, and which can be applied to every-day life? To such a question it is wiser to reply that suggestions there are, but the danger is that people will make suggestions into hard and fast rules, and on the strength of these become dogmatic to the exclusion of all other ideas. With this warning it is then possible to proceed to outline broad suggestions for a functional society. First it is necessary to begin with the statement that the true function of all Industry, Commerce and Professional occupations is the service of the community. The real function of the work at which we 'get our living' should be the satisfaction of others, quite as really as our own. There is a great need for us to get back to a clear realization

that the function of all our activities is not merely to provide what is necessary for ourselves, but also to minister to the needs of our fellows. Once this principle is clearly grasped the adequate motive for work will have been found. It may be that the present organization of industry can be cleansed and purified by modifications so as to express this motive. But if not, then the whole system must be modified so as to admit of its expression in the daily business activities of civilization. This naturally assumes that employers and employees are equally the *servants of the community*. The direction of all forms of work to the service of the community would profoundly modify the present autocratic relationship of master and man. In the light of the true ideal they are really fellow-servants, each contributing his share of service to the life of the community; although the employer would be conscious of a greater responsibility, because to him is so largely given the power and privilege of directing the labours of other men. The first step to this broader and fuller partnership will be found in an increasing measure of consultation between employers and employees, involving the admission of those who work in any business, to some share in the control of it.

Such a principle of partnership will not be restricted merely to a share in the control of the industrial side of the business, but will also involve a change in the method of distributing the profits. At present after the wages and salaries of employees have been paid, and the employer takes what he considers to be his share of the profits, and also sufficient has been allowed for the payment of a reasonable rate of interest on capital and suitable sums to reserve and contingencies, there generally remains a surplus. This surplus fund is considered to be the unquestioned property of the employer or shareholders. It is really the product of the joint efforts of the employer and the employees, aided by the protection which a modern state affords to commercial operations. The principle of partnership will involve the sharing of this surplus equitably among those who have contributed to its production. The sharing of losses should also be provided for corporately. Such a system is already at work in the Priestman's Engineering Works in Hull, and the results have been more wonderful than was anticipated. This firm is in busy thriving work at present, when other firms around, working on the old system, are on the verge of closing down.

The principle of mutual service requires that men should devote their labour to the service of the whole people. The obligation is even stronger that those natural resources, which are the creation of no man's labour, and which are essential to the life of the nation, should be held and utilized for the greatest advantage of all. At present these resources are often available only on the terms their owners impose. In a functional society they would be subject to public control, and so their use for the benefit of all would be ensured. Of course in such society there would be no place for drones. When allowance had been made for all those who are unable to render service, whether children, or adults rendered incapable by some disability, or those who have retired for a well-earned rest, it remains true that no one has any right to draw from the storehouse of the nation's wealth, who does not contribute to its production, either directly or

indirectly through one of the many services which the needs of modern life require.

The obligation to render service to the community carries with it a corresponding obligation of the community in regard to its members. Undeserved unemployment, sickness and misfortune occur to millions of men and women and the unfortunate part of the business is that it is generally those who can least bear these misfortunes, who seem to be called upon to suffer most at their hands. A well ordered community would be a family, and no family would deny the right of one member to a share of the common store, if he or she were prevented through no fault of their own from contributing to that store. The young, who are not yet strong enough for service, the aged, who have borne the heat of the day and are now past service, and those incapacitated by some infirmity have equally a right to consideration. A truly functional society would make suitable provision for all such cases as these and rightly so.

Last, but certainly not any less important than the other points, is the question of the relationship such a society must bear to international problems. The principles on which such a community is founded will have to be extended to include other states and people. If this is to be achieved a new national spirit must be developed, and other nations will have to be regarded not as rivals to be thwarted, but as friends, who have their contribution to make to the progress of the world. The word 'foreigner' will no longer be synonymous with enemy, but the equivalent of brother. This is the work which the League of Nations has begun, and the spirit grows with every extension of the work of that body, until finally we shall secure a federation in which the qualities of different races shall not be crushed, but brought to their fullest development in a spirit of co-operation. The whole philosophy of the type of life, which has been outlined in this thesis, has been summed up by the genius of Tolstoy in one sentence. 'Men must be taught to *live*, that is to take less from others, and give more.' The crying needs of to-day call all true men to a crusade for this purpose.

G. DAVIES WATKINS.

MADRAS

The Motive of the Ritual

The object of this paper is to enquire into the nature, the purpose and the significance of the 'ritual,' typical of certain forms of South Indian religion, giving the term 'religion' a very wide significance so as to include every kind of ceremonial. It shall be my main task to try and lay bare the psychological needs which are met by the systematic performance of a ceremony. Before we begin to consider this aspect of the question, let us be clear as to the nature of the ritual.

I

In South India a ritual is always concerned with some deity, good or bad. It may be that the good deity is to be thanked for some blessing or petitioned for one; or it may be that the evil 'spirit' is to be propitiated for safeguarding family interests. So the first thing or object taking part in a ritual is a deity and it is represented by a concrete object such as a stone, vessel, a turmeric cone, or a cocoanut surrounded by flowers—in fact, anything. For what does it matter *what* represents a deity so long as the deity *is* represented? But the deity must be treated with due respect, and so the place where the puja is to be performed is well cleaned, is carefully purified with holy water, if possible, from a temple. The place having been duly prepared, attention centres on the time which, it is plain, ought to be auspicious.

The persons taking part in the proceedings prepare for the occasion, having purified themselves externally and internally. They bathe, they fast, they pray, they remain pure. They wear special clothing, they wear symbolic and purifying caste marks and they wear certain beads which possess great magical virtue. The offerings include flowers, fruits, coins, metal objects and animals, including fowls. The most important witnesses, earth, fire (represented by a light sometimes), air, ether and water, are present, and at the appointed hour, the function begins. It lasts for a certain length of time. Mysterious signs are made, words of magical and wonderful import are pronounced, and with great solemnity the fruit and other offering, are presented. All stand and watch in mute reverence, and those who have vows to fulfil, do it now: those who have prayers to make, do so now: those who have grievances may seek to set them right now. Suddenly the deity possesses one of the worshippers, and he begins to make sundry noises, rushing about attacking imaginary enemies, or he declares satisfaction at the ceremonial offerings. The remnants of the offerings are preserved to be eaten at once or to be used whenever the power of the deity is necessary to fulfil one's desires.

II

The ceremonial thus briefly described is very simple, but the importance of it is really very great. If we consider the motives which inspire the regular

performances of the rite, we shall find that various psychological elements enter in. So that it is clear that the ceremonial is inspired by a complex of motives drawn from various and widely differing sources.

The first and most important feature of the ritual is, of course, the social element involved in it. It is an occasion for various members of a community or at least a family to assemble and engage in a common function. Our normal actions involve the intercourse of man with his fellow-man. But to make the bonds of relation of friendship between the members of a group firmer, such an occasion as a ritual or public ceremony, the performance of which is in the interests of all the members, is absolutely essential. Human nature is such that unless compelled to do a certain thing, it is oftentimes unwilling to do it. It needs an appeal to the fear instinct to make certain refractory members of the community associate with the other members. We have here not only a manifestation of the gregarious nature of man, but also an effective tool for keeping the members of a community within its fold.

In the second place, it is not the mere love of gregariousness, but also a desire to keep in the footsteps of one's ancestors. 'Custom,' it has been said, 'will bring true delightfulness.' Custom is the second nature of the community. The easiest thing for the unreflective man is to stick to the custom of his predecessors and carry out the mandate of the community. One individual performing a religious ceremony who was questioned as to its significance, replied that the only significance he knew of was that it helped to keep in memory his dead ancestors who regularly performed the ceremony and that it was the only link between him and them.

Man, it has been said, is a religious animal. He prays, worships, and offers sacrifices, not always with an ulterior end in view but often enough just for the satisfaction of worshipping. He needs some object of worship no matter what the object of worship turns out to be. Religion is, as it were, an instinct in man and calls forth his organic responses in the form of pujas, prayers, fasts and vigils and he goes on modifying these responses subsequently as occasions arise. But in primitive life or life not much removed from primitivity, the worship mainly takes the form of something *done*, some *activity* brought about. The average religious man of this type is not at all satisfied with mere words, though couched in the loftiest language. He is not content with quiet meditation for these to him, naïve realist that he is, are mere waste of time and breath. Thus worship in the form of ceremonial has reference to the conative side of a man's life.

The principle of causality is such a clear-cut principle that it is easily apprehended by every person. That every cause brings forth its due effect is well-known to all--particularly so to naïve realists. To act is to cause to act. To say is to contract a sore throat, for in the opinion of the ordinary unsophisticated man, words never did any good, except to call forth other words in return. The point becomes amazingly clear if we consider such a simple habit as swearing. This is usually *done* not pronounced, as in the case of the putting out of a piece of burning camphor with the palm of the hands. To get some benefit out

of the deities, the easiest way is to act in a certain way, for an action can never be denied though words may be. Especially is a ceremonial, an actual performance, necessary in the case of malignant spirits which it is more necessary to propitiate than many of those unoffending benefit-showering deities.

One more fact may be added in this connection. The ceremonial furnishes a variation from the ordinary daily routine of our lives. It is necessary to have something to which one may turn with eager expectation—an event which will provide ample excitement before and after its occurrence. What more satisfactory for such a purpose than a religious ceremony?

III

Having in this way considered the motives leading up to the performance of a ceremonial, we may now enquire as to the motives of the actual ceremony itself. With a view to this we shall let our attention rest more closely on the various aspects of the ritual.

There are first the religious associations of the ceremony. More than anything else it is religion that inspires awe and wonder in man. For in religion and religious worship, man plays the part of an inferior, standing before a supernatural, unseen, unseeable, but felt presence. It is quite possible to deal with the most fearful enemy when he presents himself to us in person. But when the enemy is invisible, then the odds are all against us. On every side we may be attacked without knowing where to direct our energies. In the same way because the deities are not to be seen, the emotions of awe and wonder are aroused in the worshippers.

In certain cases, these two emotions are induced in the beholders either by the secrecy maintained, the mantras used being pronounced inaudibly, by the loudness with which certain words are uttered, by the curious, outlandish gestures used, or by the superfluity in respect shown to the idols worshipped. This is done for the especial edification of those who are quasi-believers in these idols and the worship of them.

But the emotional elements entering in do not end there. For we must include under this head, the emotion of joy at the satisfactory termination of the worship, the emotional excitement of being in touch with the supernatural, and the satisfaction of having preserved the family from evil influences by an assurance from the gods themselves.

To the person mainly concerned with the worship, for it is one person who on behalf of the rest carry on the ritual, the occasion affords a splendid opportunity for bringing into play his self-assertive tendencies. One can judge from the calm, collected and authoritative way in which the worshipper proceeds that he is a man of great importance. His external and, most often, internal purity (he is under a rigorous course of training for some days before the function), his fasts and vigils, his imposing attitude, his aloofness from the others, all bear witness to his self-importance and to the responsibility of his office. He orders the others about in such a way that they dare not disobey him.

When he becomes possessed, as he invariably does, his actions readily lead the people to believe that he is not himself. He is the favoured of the deities, the one they have chosen to be their medium, and therefore he is all in all. Respect to persons is now at a discount. Big men or small, elder or younger, they are just the same. They are addressed just as if they were the meanest slaves. Moreover at the end of the 'possession,' the man is apparently entirely ignorant of what happened during the interval of the deity's 'presence.' The others have to tell him what the deity told them to do, either to achieve certain objects or to ward off certain evils.

It may seem rather incongruous with what has been said above to say that there is also a tendency for the play instincts to be brought into function. In the first place, the puja is the result of imagination. It is imagination that suggests the conduct of the worship on certain lines; it is imagination that frames the formulas, and it is imagination that suggests the deity-possession at the end of the conative part of the ritual. Now this deity-possession is what I have in mind when I speak of the play instincts. For, taken as it is, it is merely play, an exercise of the limbs and vocal organs, and apart from its religious significance it is a form of amusement, gotten up for young and old. The 'get-up' of the worship, meaning thereby the adornment of the deity with precious things like jewels, is a kind of constructiveness of which children are particularly fond. The ringing of the bell, the burning of the camphor, the lighting of a number of lights even though the puja is conducted by day, the offerings and sacrifices are, taken in the abstract and considered apart from their religious significance, but kinds of play responses.

There is one aspect of this question which is true only of certain forms of worship and certain types of deities. It is usual for devotees to ill-treat the deity by offering dirty things, by spoiling the temple and by showering filthy objects on the idol's head. In addition to this the people have license to abuse the deity—a 'goddess usually—in the vilest possible terms. It is as if the people have taken a moral holiday,' and strain their license to the utmost. I have heard of a garden where it is permitted for any person to eat as many mangoes as he can: but he may not bring one outside the place. Similarly it is as if on that day the people have the license to make free use of their vulgar vocabulary. And the most curious part of it all is that the deity delights in the terms of abuse poured on her. In fact the man who can abuse most gets the greatest and best blessing. This is clearly a play response.

One fact may be pointed out in connection with sacrifices. Now it is very often the practice to use animals as objects of sacrifice. I suggest that there lies more behind this kind of sacrifice than appears on the surface. Apologists for non-vegetarians claim that if animals are not destroyed for food, then the human race had better look out for itself. For, the animals and birds breed twice or thrice as fast as man at a modest computation, and if this growth is left unchecked, the fate of man is sealed. He would find no room for himself, and the 'lord of creation' story would be a myth. May it not be that man in his

struggle for existence and anxiety for self-preservation, has given a religious colouring to his campaign against his competitors for tenancy of the world. It is a common experience that even those who scrupulously practise *ahimsa* in connection with their food, very often join in animal sacrifices. Therefore in this system of animal sacrifice, man is but proving his instinct of self-preservation.

IV

In considering some of the attitudes in connection with the ritual, we have the attitude of faith brought very prominently before us. The man who performs the ceremony never for a moment doubts the efficacy of it. He believes that for the fulfilment of his desires it is the only way. If owing to certain reasons, the ceremony could not be performed at the appointed time, he becomes nervous as to the consequences. The smallest accidents, life's little worries, are attributed to the non-performance of the rites. And sure enough when the ceremony comes to be performed, an allusion is made to the delay in the performance of it. If a member of the family gets into a scrape thereafter, he is confident that his deity will help him to get out of it, in return for the ceremonial.

Side by side with the attitude of faith, there is that of submissiveness. There is a sense of abject submission in the worship of the deity. One person who has risen above the primitive level in religion, was observing certain of these rituals and he is now inclined to think that 'these minor deities are more "true" than the so-called higher gods.' By his actions, by his words and by his facial expressions the master of the ceremonies indicates very clearly how submissive a position he holds. He is as nothing before this tremendous deity—the name is usually given—who has done mighty deeds, who can at will turn the world upside down, who can ride at a thousand miles per hour on horses tall as palm trees.

Submission leads to flattery and we have the evidence of it in many of the words used by the people in praise of the deity. There is usually a description of the personal features of the deity. Imagination is given free play, and all incongruities are hauled into service. Then comes an exaggerated picture of the virtues of the deity. Whether it be good or bad, the qualities are always something to be proud of. To give an imaginary description of the qualities of a deity:—'Oh Thou who art not content with a thousand pots of toddy. Oh, Thou before whose shrine none worshippeth without fear of some harm impending, who killest a thousand men for mere pleasure, who drinketh the blood of a hundred oxen, who feasteth on men, women and cattle alike, who withholdeth our rains and layeth waste our country with thy wonderful pestilences, hearken unto our words!' This account is of course imaginary, but it clearly conveys the spirit of most forms of address used by people to flatter the deities.

There is a Tamil proverb which says 'No man acteth but for gaining some private end.' Even in the case of worship, this holds good. A puja is done, more often than not, to achieve certain ends. There is, as it were, a contract between the deity and the devotee. The devotee says 'If by this time next year,

you see that my crops thrive, my debts are cleared, my children free from the diseases that now plague them, I will give you a cock and a lamb.'[1] The deity, hearing this and anxious to get the offerings, fulfils its part of the contract. The man then gives the offerings and both parties are happy. If the deity fails to oblige the devotee, and instead of doing what was asked of it, blights the crops, makes him run deeper into debt, and carries off two of his children, then it has lost a faithful devotee. And if the man fails to fulfil his part of the contract, then woe unto him. The discomfiture that shall overtake him shall indeed be very great. This attitude we may characterize as that of barter.

It is thus apparent that beneath the surface the 'simple' rituals that we see performed by the hundred about us, are indeed very complex affairs involving many psychological factors, fulfilling many of man's organic and social needs and holding an important place in the life of the individual and the group.

[1] This vow was actually overheard by the writer at a gramadevata temple near Madras.

K. BALASUBRAMANIAM.

MADRAS.

Boswell's Life of Johnson

How much should we know of Dr. Johnson, if a certain Scotch youngster had done as his father wished him to do, and spent all his time in the Parliament House in Edinburgh? Sir Leslie Stephen says that Johnson would have become a recognized name, for his Dictionary and his delightful Lives of the Poets, to a few students of the history of literature, and that some of his best sayings would have passed into the current speech, attributed in all likelihood to Sydney Smith. Sir Walter Raleigh, reacting from the long movement that belittled the hero because the hero-worshipper had made him, and then belittled the hero-worshipper for admiring the hero, tries to convince himself that Johnson would have suffered nothing by the complete loss of Boswell. The question, like all good questions, cannot be finally answered; but probably most people would agree with Stephen rather than with Raleigh. It is certainly not true that Johnson would have been generally forgotten but for Boswell; but it is useless and foolish to try to abate the greatness of Boswell's achievement; it is nearly impossible to honour and admire him for it too highly.

I

The first meeting of Johnson and Boswell was beyond a doubt one of the most important events in British History. It produced greater and better consequences than most; and it is very likely the best described. So I make no apology for quoting almost the whole of the account.

At last, on Monday the 16th of May, when I was sitting in Mr. Davies's back-parlour, after having drunk tea with him and Mrs. Davies, Johnson came unexpectedly into the shop; and Mr. Davies having perceived him through the glass-door in the room in which we were sitting, advancing towards us,—he announced his aweful approach to me, somewhat in the manner of an actor in the part of Horatio, when he addresses Hamlet on the approach of his father's ghost, 'Look, my Lord, it comes' . . . Mr. Davies mentioned my name, and respectfully introduced me to him. I was much agitated; and recollecting his prejudice against the Scotch, of which I had heard much, I said to Davies, 'Don't tell him where I come from.'—'From Scotland,' cried Davies roguishly. 'Mr. Johnson, (said I,) I do indeed come from Scotland, but I cannot help it.' I am willing to flatter myself that I meant this as light pleasantry to soothe and conciliate him, and not as an humiliating abasement at the expense of my country. But however that might be, this speech was somewhat unlucky; for . . . he . . . retorted: 'That, Sir, I find, is what a very great many of your countrymen cannot help.' This stroke stunned me a good deal; and when we had sat down, I felt myself not a little embarrassed, and apprehensive of what might come next. He then addressed himself to Davies: 'What do you think of Garrick? He has refused me an order for the play for Miss Williams, because he knows the house will be full, and that an order would be worth three shillings.' Eager to take any opening to get into conversation with him, I ventured to say, 'O, Sir, I cannot think Mr. Garrick would grudge such a trifle to you.' 'Sir, (said he, with a stern look,) I have known David Garrick longer than you have done; and I know no right you have to talk to me on the subject' . . . I now felt myself much mortified.

'Perhaps I deserved this check,' Boswell admits. There is no doubt about it. The first remark was fatuous, the second extremely impertinent. Johnson was

fifty-three years old, and the Dictator of Letters; Boswell was twenty-three, an ignorant youngster. But Boswell's 'ardour was uncommonly strong, his resolution uncommonly persevering,' and he paid court assiduously; the rugged philosopher was soon won over by the young man's fervent and sincere homage, and this unpromising introduction was the beginning of a close intimacy. Between May and August 1763, they met eighteen times, and liked each other so well at the end, that when Boswell was setting out to pursue his legal studies in Utrecht, Johnson bore him company on the two-days' journey to Harwich.

Of Johnson's life, twenty years now remained; and Boswell spent some part of fifteen of them in his company. He came up to London for some weeks at Easter, when he could afford it; his greatest joy was to attend the Good Friday services in St. Clement Dane's, with Johnson. They had some 'jaunts' together also, the chief of them being the famous 97-days' journey to the Hebrides in 1773. Altogether they met about 200 times, and travelled together on 143 days. According to Hill's calculation, the various weeks and months which Boswell spent within reach of Johnson, amounted in all to a little more than two years.

And during these meetings Boswell never forgot his purpose of surviving Johnson, so that he might write his *Life*. Even at that first encounter in Davies's back-parlour, Boswell retained enough presence of mind, 'stunned' though he was, to note down several scraps of Johnson's conversation; and he laboured at the art of reporting till he was master of it. He gave up much that was dear to him, for the sake of collecting material. Johnson would sometimes decide on a whim to do without dinner, and Boswell learnt to go hungry also, for the sake of conversation; though at first, he owns, it was 'somewhat painful.' In the first year he would sit up, working at his minutes, four nights in the week; and with practice he became able to fill eleven closely-printed pages with the talk of a large company throughout an evening,—his whole account bearing the unmistakable stamp of truth. Johnson's conversation is handed down more accurately, fully, and convincingly, than any other man's has been.

Boswell took his time to the work. As soon as Johnson died, in 1784, everyone who had known him began to write a book about him. Many of these Lives and Essays became popular: but though Boswell was annoyed by some of the misrepresentations that passed current; though he was panting for immortal fame, and felt pretty confident that his Life of Johnson would bring it; and though he was badly in debt, still, he conquered himself, and waited till the work was perfect. Finally the book appeared, two closely-printed volumes, in 1791.[1] It gained its place at once. Four years later he died, his work accomplished; and the interval had been spent chiefly on revising and enlarging his book, with the help of the fine scholar Malone. At his death he left the third edition almost ready, and Malone completed it, according to Boswell's instructions.

Boswell knew perfectly well what he was doing, through those seven years which he passed revising and arranging the vast materials he had gathered.

[1] The Journal of a Tour to the Hebrides had already been published in 1786.

They were of all kinds, many of them very *trifling*; but he has arranged them extraordinarily well; the scraps are not at all scrappy. And I think that only two remarks are repeated,[1] which is wonderful, if you consider what a mass he had to digest.

In the composition of his 'Flemish picture' as he called it, he was willing to take any amount of trouble to bring in everything, and to bring each detail into its own place. He says himself, in the Advertisement to the Third Edition, 'The labour and anxious attention with which I have collected and arranged the materials of which these volumes are composed, will hardly be conceived by those who read them with careless facility. . . I must be allowed to suggest, that the nature of the work . . . has occasioned a degree of trouble far beyond that of any other kind of composition.' But Boswell laboured so well and so skilfully, that he has left no trace of effort in his pages. They can be read with 'careless facility.' And I think we must admit that the trouble was not wasted. 'I will venture to say', he writes at the beginning, 'that he will be seen in this work more completely than any man who has ever yet lived.' The claim is made so simply, and it is fulfilled so completely, that you hardly realize how startling it is. Boswell is so unobtrusive, that foolish men always take him for a fool.

II

But I am not sure that the Life, in its entirety, is read and appreciated as much as the rhapsodies of a few critics would lead us to suppose. The reasons for its being less read than it certainly ought to be are, I think, two. First, it is enormously long. The first edition, according to the author's own calculation, contained four hundred and one thousand, six hundred words; and the second and third were successively and greatly enlarged. That alone, in these days when we are all so busy, and when there is so much to be read, is a great drawback.

Secondly, most people start upon it with wrong ideas in their heads. I should think that most of us went to it for the first time because we had heard some of Dr. Johnson's sayings quoted, thought them very humorous, and looked forward with delight to fifteen hundred pages of them. So Boswell is apt to be a disappointment. The beginning, to speak plainly, is at first dull; so, at first, is a great deal of what follows—the tedious discussions, the long letters on trifling subjects, and all the things, to be brief, which make the Life a book for fools to laugh at, as Boswell knew well enough himself. The famous anecdotes can be compressed into a very small pamphlet—and in fact this has been often done; the best attempt that I know of being a scholarly one by Mr. R. W. Chapman of the Oxford Press. But these selections are always disappointing more so than most selections: though the anecdotes are very good in their kind, perhaps unsurpassed.

For the chief charm of *Boswell* lies in its very length, and in the very multitude of the details. It takes some time to find this out (you must find it out

[1] One is Goldsmith's application of an old joke to Johnson: 'There is no arguing with Johnson; for if his pistol misses fire, he knocks you down with the butt end of it'; and I think I remember noticing another also, but I have forgotten what it was.

for yourself); for myself, I read the whole book twice, as a matter of duty, before doing it. It is best to admit frankly that unless a man has a good deal of leisure, some perseverance, and some fondness for reading, he will find more amusement in one of the little modern books about Johnson, than in Boswell abridged or unabridged. (I would instance Raleigh, Bailey, Stephen, and the essays of Augustine Birrell.) Boswell's details are selected and arranged with extraordinary skill, and all subordinated to the one grand purpose, not of glorifying Johnson, but of giving a complete picture of him, his weaknesses as well as his strength: Boswell knew as much about his weaknesses as the most unfriendly critic has dône. This method represents Johnson much more life-like than a shorter or less comprehensive book could do; just as one can learn much more of a man's personal appearance from several momentary glimpses than from one portrait, however good.

But as one reads, one gradually comes to appreciate another pleasure which Boswell gives us incidentally. He is clear-sighted and impartial; yet every page is ennobled and made attractive by the warmth and sincerity of his personal affection for his hero. And so the Johnsonian finds that he reads Boswell's Life of Dr. Johnson partly because it is a Life of Boswell also—a candid and complete picture of a character very vain and childish, contemptible in some ways, and yet infinitely lovable too. Sage and disciple, the two together are rich company indeed.

III

A word more should be said about Boswell's method. The first thing to be noted is the great wealth of minute accuracy, of which I have said something already. Next comes his lavishness of detail. Nothing was unimportant to Boswell, if it was connected with Johnson. Emetics and night-caps became considerable, if the Doctor discussed them. The biographer notes every passage of poetry that his hero quoted, for these passages had a peculiar value for him ever afterwards. If Johnson was in a silent mood, and in a long time said nothing but 'Pretty baby' to a child, Boswell noted it down.

To Boswell indeed, Johnson's importance is so great that it even gives importance to the things said to him. Boswell reports a good deal of his own conversation, and quotes at enormous length from his own letters, in the Life; but I don't think that he did it in vanity only. He honestly felt that anything which had amused the Doctor, or occupied his attention even for a moment, was certain to interest posterity, and was entitled to 'live with the immortality of his fame.'

He collected information of all sorts unwearyingly; he started topics to see what Johnson would say. They might be very ridiculous topics. In a large company, he suddenly asked, 'If, Sir, you were shut up in a castle, and a new-born child with you, what would you do?' Johnson, with his unfailing good sense, replied, 'Why, Sir, I should not much like my company.' But Boswell persisted in his search for instruction; Johnson finally gave it, and settled for ever how, in such peculiar circumstances, a baby ought to be treated. He would wash it much, he said—'but with warm water to please it, not with cold water to give it pain.'

'But, Sir,' asked Boswell, 'does not heat relax?' 'Sir,' said Johnson, 'you are not to imagine the water is to be very hot. I would not *coddle* the child.'

Boswell delighted in Johnson's conversation so much as to forget himself altogether. If a joke was good, he liked it none the less for being directed against himself. Consider this passage:

'I told him, that music affected me to such a degree, as often to agitate my nerves painfully, producing in my mind alternate sensations of pathetick dejection, so that I was ready to shed tears; and of daring resolution, so that I inclined to rush into the thickest part of the battle. 'Sir, (said he,) I should never hear it, if it made me such fool.'

The completeness of self-revelation here is extraordinary. Boswell enjoys the downright forcefulness of Johnson's remark. But he also enjoys the thought of his own sensibility: you can imagine him recording his little rapture with immense satisfaction; and he is occupied so thoroughly with this double joy, that he never stops to think whether he may not be making himself a laughing-stock.

For another instance, here is one of the very few digressions in the book:

We talked of his (Johnson's) Journey to the Western Islands, and of his coming away 'willing to believe the second sight' which seemed to excite some ridicule. I was then so impressed with the truth of many of the stories of it which I had been told, that I avowed my conviction, saying, 'He is only *willing* to believe: I *do* believe The evidence is enough for me, though not for his great mind. What will not fill a quart bottle will fill a pint bottle. I am filled with belief.' 'Are you? (said Colman,) then cork it up.'

The conversations which Boswell reports owe their charm partly to his readiness to efface himself in enjoying them, and partly to mere genius. No one else, so far as I know, has ever reported actual conversations so vividly, so dramatically, so plainly bearing the hall-mark of truth. The greatness of the task astonished Boswell himself, when he had finished it and was able to look back. 'The stretch of mind and prompt assiduity,' he says, 'by which so many conversations were preserved, I myself, at some distance of time, contemplate with wonder.'

Boswell's courage in reporting pages of remarks about trifles, and his genius for making such remarks attractive and memorable, cannot be represented except by direct quotation; and if I began to quote, I should not know where to leave off.

IV

Nothing, we are told, is impossible; but I think it must be very hard to admire Boswell's Life with moderation. Either you find it a dull, conceited, and trivial book, intolerably long, with only a few 'purple passages'; or it becomes to you a standard of reference by which you model your life, as you do by the character of some wise and authoritative friend. Stevenson wrote in a letter, 'I am taking a little Boswell daily, by way of a Bible; I mean to read him now until the day I die.' G. H. Lewes declared that he liked or disliked men in the same degree in which he found that they liked or disliked Boswell.

'A man, indeed,' says Stephen, 'may be a good Christian, and an excellent father of a family, without loving Johnson or Boswell, for a sense of humour is not one of the primary

virtues. But Boswell's is one of the few books which, after many years of familiarity, will still provoke a hearty laugh even in the solitude of the study; and the laughter is of that kind which does one good.'

And a third virtue, great also in its way, is that the book is true to its description on the title-page: 'the whole exhibiting a view of literature and literary men in Great-Britain, for near half a century.' Few books give a 'historical atmosphere' so completely, or so pleasantly.

J. R. MACPHAIL.

EDINBURGH

An Indian Appreciation of Robert Burns

Among the illustrious names in the history of the English literature in the 18th century, the name of Robert Burns stands out prominently as that of an apostle of democracy. Burns's democratic spirit was not confined to topics merely political but extended to social and literary ones as well. The theme which one finds impressed in the poetry of Burns is the gospel of the brotherhood of man which runs through every line of it. Burns's poetry is throughout an expression of this ideal, and, lyric poet as he essentially was, Burns inculcates it in a way which few poets have ever succeeded in doing. It will be the endeavour of the writer to understand the poetry of Burns with special reference to his ideals and place them before the reader to the best of his ability.

Robert Burns was born at Ayr in Scotland in 1759. He came of a very poor Scottish peasant stock and was the eldest of a pretty large family. The father of Burns could ill afford to give his sons the best education of the day, but his sagacity and right mindedness induced him to give them the best education that a man of his social position in his time could give. And this education was, after all, nothing more than what can be termed 'coaching' at the hands of a private tutor. It was the special fortune of Burns, however, that his master, unlike many other private tutors, instilled into the young mind of Burns an ardent love for poetry, especially, Scotch poetry. The genius of Burns stood him in good stead and he improved his knowledge by vast study, reading everything that came his way. It was probably this circumstance in his youth which in later years he, perhaps, found confirmed that made him entertain no faith in the efficacy of school-taught education and denounce in no uncertain terms the system of education in his day. His reference to the teaching profession was not complimentary either. His view was that 'grammars' were of no avail if 'honest nature' made us fools, and that students who 'gang in stirks' to college classes 'come out asses' and that by 'dint O' Greek' they cannot 'climb Parnassus.'

The elder Burns had often to indent upon the help of the young poet and the son co-operated with him in his labours but not without a feeling which might have found expression at times 'that making of rhymes and working at times does little or nothing at a.' Nevertheless, Burns cherished the highest regard for his father and prided himself on being a farmer's son; and 'the saint, the father, and the husband' so beautifully portrayed in his immortal 'Cotter's Saturday Night' was no other than his own father whose only failings he elsewhere described as 'leaning to virtue's side.'

Burns composed his first poem when he was only fifteen and, in the course of a very few years, was able to compose a fairly large number of exquisite Scotch lyrical poems which brought him the esteem and admiration of all his neighbourhood. The incentive given to him by the first reception of his poems by his

countrymen was such that he cancelled his original idea of migrating to America and paid a visit to Edinburgh, the metropolis of Scotland. The welcome extended to him by the citizens of Edinburgh was nothing short of royal, and the 'ploughman poet' as Burns came to be known during his stay in that city had an easy introduction to the bluest blooded aristocrats like the Earl of Glencairn and the leading lights in literature like Professor Dugald Stewart and Doctor Blair. The poet benefited considerably by his Edinburgh visit, for not only was his greatness as a Scotch national poet admitted by persons who had the last say on the subject but also he was able to secure a commission in the Excise Department through the kind intervention of his friends whose esteem he had won by his poetic talents. The commission, however, Burns did not immediately avail himself of, evidently because of his dislike for service. On his return from Edinburgh, he married Jean Armour—his infatuation for whom had led to a scandal in the early stages of their attachment—and settled at Ellisland where he rented a farm.

A few words may be here necessary to explain the matrimonial relations of Burns, for his sexual immorality was the subject of the severest condemnation at the hands of some of his critics. Burns was of an extremely passionate nature, and, soon after he left his parental home in his twenty-third year, he fell a prey to this weakness. From the various poems and love-songs written by him, one is led to doubt whether he led a straight private life at all. His secret marriage with Mary Morrison whom he immortalized in his poems, the relations between himself and the father of Jean who, at one stage, contemplated taking criminal proceedings against him, his unblushing correspondence with 'Clarinda,' a grass-widow, living in Edinburgh at the time of his first visit to that city, and his poems like 'The Lass that made the bed to me' as well as his 'Welcome to his love-begotten daughter' are not at all creditable to the fair name of Burns. And it was Lockhart, I believe, who said that the poet's marriage with Jean was a really noble act on his part. Without in any way attempting to explain away this weakness of the poet, one should in fairness to him admit that none of his attachments were permanent and his infatuation prompted by the occasion, faded from his memory soon afterwards. His impulsive nature certainly led him at times into 'thoughtless follies' in Burns's own words but he sincerely repented of them later on. What is more, Burns was conscious of his own failings, and in his 'Epistle to a young friend' hoped that the latter might 'better reck the rede than ever did his adviser.'

Burns's writings also reveal his love for strong liquor and he never hesitated for a moment in expressing his bias towards Scotch drink. 'Willie brewed a peck of maut,' 'A bottle and a friend,' and similar poems serve to illustrate this weakness of the man. Burns had always 'a club of good fellows' at his orgies and it might well be guessed that the convivial gatherings of the sort described in 'Willie brewed a peck of maut' egged him on to excesses when his friends took advantage of his large heartedness, and landed him in misery in the end; and it is on record that none of his 'club of good fellows' ever came to his rescue in his days of adversity. Wordsworth, an ardent admirer of the poet, in the course of his defence of Burns's conduct in life stated, in all seriousness, that 'the poet

trusting to primary instincts luxuriates among the felicities of love and wine and is enraptured while he describes the fairer aspects of war, nor does he shrink from the company of the passion of love though immoderate, from convivial pleasure though *intemperate—nor from—the presence of war though* savage, and recognized as the hand-maid of desolation.' After all is said, it is not fair to judge too strictly the private character of the man in considering the poet in him. Suffice it to say, in spite of occasional lapses from virtue, the home life of the poet was happy and contented and this was rendered easier by the goodness and enduring nature of his wife who did not allow the vagaries of her impulsive husband to disturb the harmony of the family.

The farm in Ellisland was not, however, a complete success, and, in spite of his supplementing the expenses of its upkeep from out of his hard-earned savings from his office as an exciseman—for Burns had the good sense to utilize his commission when he perceived the unremunerative nature of his farm—it proved a complete failure in the end. Burns wound up this unprofitable enterprise soon afterwards and retired to Dumfries in the neighbourhood of Ellisland in 1791, where he spent the remaining years of his all too short life. It is supposed that the bulk of his poems was composed during his stay at Dumfries, while attending to his duties in the Excise department. Burns lived a fast life and, what with his deep potations and convivial gatherings, when his friends preyed upon his bounty, his health completely broke down, and he had to spend his last days in want and misery, deserted by all his time-serving friends save one, a Mrs. Dunlop, who remained constant to the end and rendered him all the help she could. A second visit to Edinburgh did not better his fortunes, and the extremely cold reception he had from its citizens quite unnerved him. Burns became prematurely old, and died in 1796 at the age of 37.

The course of Burns's life was not destined to run smoothly. Fortune never smiled on any of his attempts to better his condition and he had to live a life of chronic penury. A life of literary leisure with a decent competency in life was the summit of Burns's earthly desires, but, alas! even this he was not fated to realize. The 'russet coat' was all that he could afford to wear, and the groat was the aggregate amount of his fortune. He confesses:

'In many a way, and vain essay,
I courted Fortune's favour, O;
Some cause unseen still stept between,
To frustrate each endeavour, O:
Sometimes by foes I was o'erpowered;
Sometimes by friends forsaken, O;
And when my hope was at the top,
I still was worst mistaken, O.'

Burns was admittedly the greatest national poet of his time and the progenitor of the romantic revival in England, for it was within two years after his death that the 'Lyrical Ballads' were published in England by the joint authorship of

Wordsworth and Coleridge, thus starting the Romantic movement in England. And what was the reward which the British nation gave to the pioneer of the great 'revival'? And who can say that Carlyle was not right in his indignant outburst that the world found for a poet of Burns's standing 'no fitter business than quarrelling with smugglers and vintners, computing excise dues upon tallow, and ganging ale-barrels?' It was the innate cheerfulness of the man, however, that kept him up and made him look upon what was given to him with cheerfulness and contentment.

Indeed, Burns was an advocate of pleasure and was an optimist to the core. He was not one of those who allow their peace of mind to be disturbed by unprofitable mental worry and anxiety. It is easy to discern this vein of happiness in his poetry. With Burns, 'life is all a variorum,' and he does not regard 'how it goes.' A life of pleasure in this world was what he sought for, no matter how or where, and Burns could find nothing attractive in the happiness or comforts of the rich as distinguished from the simple and coarse pleasures of the poor. 'Even the sober bed of marriage' does not, in his opinion, 'witness brighter scenes of love' than those of the jolly beggars who 'hug their doxies on the hay.' 'Happiness is shy' and cannot be had when *sought* for. And he would never postpone the present enjoyment of his happiness for a fancied pleasure of the future. In short, 'the present' is in his power and he would enjoy it. Burns's ideal was that of a simple, plain, countryman whose wants are few.

> 'Wi' sma' to sell, and less to buy,
> Aboon distress, and below envy,
> O, wha wad leave this humble state
> For a' the pride of a' the great?'

His bitter experience of life made him also recognize that for some inexplicable reason some secure a fortunate position with no effort of theirs, while others like himself with no definite path chalked out by themselves are destined to end their lives in want and obscurity. According to him,

> 'Some, lucky, find a flowery spot,
> For which they never toiled nor swat;
> They drink the sweet and eat the fat,
> But care or pain;
> And, haply, eye the barren hut
> With high disdain.

But Burns recognizes that 'poor wights' like him who 'zig zag on' without observing any 'rules' or 'roads' and swerve 'to right or left' eternally come to grief in their old age. How true this is of the many 'failures in life!'

Burns was never enamoured of high life or riches. He would content himself with possession of 'wit and sense' and does not mind if he is turned adrift through 'Scotland wide' provided he is blessed with these gifts. His warning to persons who hanker after riches and power is well worth attention.

'All you who follow wealth and power
With unremitting ardour, O,
The more in this you look for bliss,
You leave your view the farther, O.
Had you the wealth Potosi boasts,
Or nations to adore you, O,
A cheerful honest-hearted clown,
I will prefer before you, O.

His sheer disgust with the conditions obtaining in this world makes him long for a state of things where man is free from care and sickness and fortune rewards only worth and merit. Really an ideal state of affairs but unrealizable in the present condition of this globe!

Burns's relations with the church were not happy. Like every right-minded man, he was a hater of cant and hypocrisy in whatever walk of life he found it. The poet probably felt the tyranny and lofty airs of the clergy in his time who put on an air of orthodoxy as a cloak for all their misdeeds. Burns confesses that his conduct might not have always been straight but he detests the assumption of godly airs by men who had no pretensions to the right kind of life at all. He would rather be an atheist than impose upon the world by wearing a false cloak of religion.

It was this dislike of hypocrisy on the part of the clergy that prompted him to lash them in the famous satires, 'The Halloween,' 'The Twa Herds,' 'The Holy Fair,' and 'The Brigs of Ayr.' It is sometimes supposed that the origin of the satires against the church lay in his championship of the 'new lights' as against the 'old lights,' into which two factions the Presbyterian Church of Scotland was divided in the days of Burns. It is even suggested that Burns was selected as their fighting man by the 'new lights.' Having regard to the real nature of Burns, it is difficult to subscribe to this theory in its entirety. Burns no doubt fought for the party of which he was a member, but it was not as a hireling that he assailed his opponents. He firmly believed in the righteousness of his party's cause and contributed his quota of help by his satires. Burns was not content with the condemnation of his ecclesiastical opponents in his satires and regretted that he did not possess the satirical talents of a Pope to give 'the rascals their deserts.' Such was the indignation he felt at the pretensions of the Church! Burns was conscious all the time that his attacks were bitter but he consoled himself with the thought that 'to stigmatize false friends' of religion could never be defaming religion itself.

The various reverses in life experienced by Burns did not, however, make him dejected and unhappy, and Burns was cheerful in spite of them. As he understands life, it is

'a' enchanted fairy-land,
Where pleasure is the magic wand,
That, wielded right,
Mak's hours like minutes, hand in hand,
Dance by fu' light.'

and that

'This life's not worth having, with all it can give:
For something beyond it poor man sure must live.'

A really sublime idea this! For is it not the hope that there will be an end to the miseries of the present life when man 'shakes off his mortal coil' and reaches 'the bourne from which no traveller returns' that makes him put up with all the indignities in this world? The thought of a life beyond is certainly the highest consolation which maintains the integrity of the human race. Burns is, therefore, sanguine enough to believe that

'The honest heart that's free frae a'
Intended fraud or guile,
However fortune kick the ba,'
Has aye some cause to smile,'

And again, real bliss does not, according to Burns, go with rank, titles, wealth, or learning and

The heart aye's the part aye,
That makes us right or wrang.'

Burns's love of independence was quite unparalleled. His spirit of independence was of course not quite in keeping with his position in life. Nay, the poet had on some occasions to give the go-by to his lofty notions of liberty. The French Revolution convulsed the whole of Europe and had for its votaries some of the most ardent and liberty-loving enthusiasts from every part of Europe, and Burns was one of the earliest converts to its creed. His sympathy with the French Republic led him into an indiscreet correspondence with the French Republican leaders and caused him to offer them his whole-hearted support in their cause. And this exuberance of his inward political convictions brought him well-nigh to the verge of dismissal from service, and it was only by a timely surrender of his favourite political opinions, as, for instance, by composing some patriotic verses and joining a volunteer corps, that he could appease the wrath of his official superiors. Burns could not help this compromising attitude for his main consideration was his 'wife and bairns' who depended upon him for their existence. This surrender notwithstanding, Burns's ideal of man and his actual condition in society as he saw him has been portrayed with a really masterly hand. He bewails the fall of the 'royalty of man' in the following vein.

'Where is man's god-like form,
Where is the brow erect and bold,
That eye that can unmoved behold
The wildest rage the loudest storm,
That ever-created Fury dared to raise.'

Burns's patriotism was on a par with his love of self respect and dignity. He placed his country first and everything else afterwards. He cherished the highest love and regard for the greatness of his country before his time and lamented its

condition in his days. The names of Wallace and Bruce who fought and suffered for his country in times of yore were a source of the highest inspiration to him for solving the question of the political dependence of his country upon England. Their names were adopted by him to exhort his countrymen to rouse themselves from their lethargy and obtain an independent status for their country. The period in which Burns lived also helped to justify his solicitude for the subordinate position of his country and countrymen in the politics of Europe. The Act of Union passed in 1707 was the culminating attempt on the part of the English statesmen for a final Union of Scotland with England. This policy of England was never viewed with favour by a large section of the Scotch population who saw in it nothing but the selfish instinct of the English to exploit their mother country and its resources for their own aggrandizement. The rebellions of '15 and '45 were taken advantage of by the patriotic Scots as occasions for their final bid for freedom, and the embers of political discontent continued to smoulder till long after Burns was born. There was, again, a certain section among his countrymen which left no stone unturned to bring back 'the bonnie prince Charlie,' their 'rightfu' king' to the throne of his ancestors. And, finally, the out-break of the French Revolution, that great political upheaval, which shook the thrones of Europe to their foundations, had a chastening effect upon the minds of the patriotic Scotchmen.

Burns, pathetically, contrasts the condition of his mother country in his day from what it was in the days of Wallace.

'Thee, Caledonia, thy wild heaths among,
Thee, famed for martial deed and sacred song,
To thee I turn with swimming eyes;
Where is that soul of Freedom fled?
Immingled with the mighty dead,
Beneath the hallowed turf where Wallace lies!
Hear it not, Wallace, in thy bed of death!
Ye babbling winds, in silence sweep;
Disturb not ye the hero's sleep,
Nor give the coward secret breath.'

Burns would do everything in his power to reach the goal of freedom. With regard to the use to be made of wealth, he counsels

'Not for to hide it in a hedge,
Nor for a train attendant,
But for the glorious privilege
Of being independent.'

His lament for the pliability of some of his countrymen who would surrender their birth-right of freedom for the English gold is most heart-felt and his condemnation of those liable to corruption most scathing.

'O, would or I had seen the day
That treason thus could sell us,
My auld grey head had lien in clay
Wi' Bruce and loyal Wallace!
But pith and power, till my last hour,
I'll mak' this declaration;
We're bought and sold for English gold—
Such a parcel of rouges in a nation!'

Burns was further conscious of the internal dissensions in his country and it was his conviction that the disunion among his countrymen would give an easy handle to the foreigners to make them a subject nation. He asserts that the wrongs of the British should be righted by the British themselves, thus anticipating long before his time the principle of self-determination which looms so large in the world politics of to-day.

'O, let us not, like snarling curs,
In wrangling be divided;
Till, slap! come in an unco loun
And wi' a rung decide it.'

What a significant lesson for the politicians of our country which is rent asunder by communal dissensions! It might be of interest to know in this connection what Burns's ideal of Government was. There is nothing in his writings to show that he advocated revolution, in spite of the fact that he imbibed to some extent the spirit of the French Revolution at one stage of his life. He was a monarchist but a monarchist who would make monarchy responsible. He was as much a hater of autocracy as he was of its opposite extreme 'mobocracy.' He says

'The wretch that wad a tyrant own,
And the wretch, his true sworn brother,
Wha would set the mob aboon the throne,
May they be damned together!
Wha will not sing "God save the king"
Shall hang as high's the steeple;
But while we sing "God save the king!"
We'll ne'er forget the people.'

His exhortation to his countrymen to secure independence is quite in the manner of a general rousing the drooping spirit of his soldiers just before battle. In fact, the incident he chose for this exhortation was the address of Bruce to his army on the eve of the Battle of Bannockburn. And Burns could find no fitter theme in the whole of Scottish History. 'Scots wha hae' is a soul-stirring, martial song which has few parallels in the history of patriotic verse. Burns composed this song extempore, and it is said that a friend of his who was with him feared to approach him as the poet was composing it.

What is more wonderful is that this spirit of independence is not confined to Burns's politics. He stood as much for the independence of his country's

literature as for its political independence and it may be stated that Burns stands unique in this respect. His sole purpose in life seems to be to strive for the securing for his country of a position of equality with the other countries in the world in every respect. He was zealous of protecting the integrity of the Scottish literature and felt not a little envious of the celebrity which other countries attained in poetry before his time. Burns would make Scotch 'streams and burnies shine up wi' the best,' and is not pleased with 'the lissus, Tiber, Thames, and Seine' alone being glorified in poetry. Burns had also no toleration for the importation of 'out-landish stuff' into his country's literature, and goes on to plead,

'Is there nae poet, burning keen for fame,
Will try to us gi'e us sangs and plays at hame?
For comedy abroad he needna toil,
A fool and knave are plants of every soil;
Nor need he hunt as far as Rome and Greece
To gather matter for a serious piece;
There's themes enow in Caledonian story,
Would show the tragic muse in a' her glory.'

Burns found beauty in every object of nature that surrounded him and this is evidenced by the choice of subjects he made for his poetry. His subjects range from the happy, contented, and saintly life of the Scottish peasant described in his 'Cotter's Saturday Night' to the swaggering drunkard who evokes a feeling of pity, horror, and disgust, but is withal so humorously portrayed in his masterly 'Tam O' shanter.' The jolly beggars who make their nest at a country-side inn and spend the night in coarse mirth and revelry find also a place in his poetry. He saw beauty again in the 'wee, sleekit, courin,' timorous' mouse, the 'ugly, creeping, blastit' louse, and the 'wee, modest, crimson-tipped' mountain daisy. The mangled hare wounded by the barbarous art' of the 'inhuman' man, and the forest destroyed for the sake of the pleasure of the 'reptile' wearing a 'ducal crown' draw his sorrowful tears. He laments the death of his friend and neighbour 'poor mailie' who was no other than a 'sheep of sense.' All beings animate or inanimate are objects of his over-flowing love and sympathy.

Burns lays down in the clearest terms what before his time never struck the imagination of the poets as to what should be the essential requisite of a true poet. He says,

'O Nature! a' thy shows an' forms,
To feeling, pensive hearts hae charms
Whether the summer kindly warms
Wi' life an' light,
Or winter howls in grisly storms
The lang, dark night!'

This trait of Burns's poetry has been vigorously defended by Carlyle and the writer can do no better than quote his inimitable words in this connection. Says

Carlyle: 'the poet we imagine can never have far to seek for a subject, the elements of his heart are in him, and around him on every hand; for him the Ideal world is not remote from the Actual but under it and within it; nay he is a poet, precisely because he can discern it there. Wherever there is a sky above him and a world around him, the poet is in his place: for here too is man's existence with its infinite longings and small acquirings; its ever-thwarted, ever-renewed endeavours; its unspeakable aspirations, its fears and hopes that wander through eternity; and all the mystery of brightness and of gloom that it was ever made of in any age or climate, since man first began to live. Is there not a fifth Act of a tragedy, in every death-bed, though it were a peasant's and a bed of heath? And are weddings and wooings obsolete that there can be comedy no longer. Or are men suddenly grown wise that laughter must no longer shake his sides but be cheated of his Farce; man's life and nature is as it was and ever it will be? But the poet must have an eye to read these things and a heart to understand them; or they come and pass before him in vain Has life no meanings for him which another cannot equally decipher; then he is no poet, and Delphi itself cannot make him one.'

And this leads me to consider 'who is a poet'? A poet in the strict sense of the word is a creator. He gives expression to the thoughts and ideals of man, however familiar they may be, in a form which better appeals to the mind, 'what oft was thought but never so well exprest.' A poet again is not fettered in his imagination. He is free, and expresses himself in the way that best suits him for the propagation of his ideal; for he is no poet who has no such ideal set before himself. The freedom which the poet enjoys in this respect is well expressed in the saying in Sanskrit *Nirankusah Kauayah.* A poet has the gift of vision and can see far ahead of his time. Again, in the words of Shakespeare, the poet 'gives to airy nothings a local habitation and a name.' The poet frees the intellect of man and leads it to thoughts of a higher and a sublimer nature; for poetry in essence appeals to imagination and feelings. Poets are, in the words of Emerson, 'liberating gods.' Further it is not the mere ability to write in metres that entitles one to be called a poet. It is the happy expression or thought that is to be sought in a poet and not the reams of poems that flow from his pen, or, as Emerson puts it, 'it is not metres but a metre-making argument that makes a poem.' Carlyle claims that a poet is a 'vates or a seer.' The poet has certainly the nobler function of the delivery of his message to humanity, for a true poet is a messenger from whom the world expects the fulfilment of a great mission.

And what was the message of Robert Burns? It was the message of universal brotherhood. This message Burns takes pain to impress in the most touching manner by means of his poems. Burns felt, as no other writer ever felt, the inequality that separated man from man and the absence of love in man to his brethren in the lower order of creation. He identified himself with the lowest in the animal kingdom and, in his letter to Mrs. Dunlop, explains the object of his mission thus. 'The heart of man and the fancy of the poet are the two great considerations for which I live. If miry ridges and dirty dung-hills were to

express the best part of my soul immortal, I had better been born a rook or magpie at once.' Again, as professor Courthope rightly observes, Burns 'sings the manners he saw and felt in himself and his compeers in his and their native languages.' A truly poetic spirit this! And is this not the spirit in which a poet should address himself? The poet who sings of things which are outside the knowledge and experience of men can never reach the heart of man. And Burns was one of the first poets who by his genius carried out to perfection this function. The mere fact that he modelled some of his poems on the lines of his Scotch predecessors, Ramsay and Fergussen, cannot detract from his greatness as a poet of nature.

We turn now to his message. 'The feeling pensive heart' of Burns was touched to the extreme by the indignities which one of his fellow-beings suffered at the hands of another. It was perhaps the absence of this 'feeling pensive heart' that made him express the inmost wish of his heart

'Oh, wad some power the giftie gie us
To see oursel's as others see us!'

And it is no wonder that Burns laments this defect in man. Burns attributes all the misery of man in this World to the acts of his brother man and concludes that 'man's inhumanity to man makes countless thousands mourn.' He could not reconcile his mind to the spectacle of one man being necessarily subordinate to another in society. He argues,

'If I'm designed yon lordling's slave
By Nature's law designed,
Why was an independent wish
E'er planted in my mind?'

Thus the prompting in the human heart for a position of independence is an indication that nature meant all men to be equal and that one can never be dependent upon another. The scheme of nature also, according to Burns, had no place for the lord who was 'but a coof' for all his wealth had pretensions and his opposite extreme in society

'See yonder poor, o'er-laboured wight,
So abject, mean, and vile,
Who begs a brother of the earth
To give him leave to toil;'

In 'a man's a man for a' that' is to be found the quintessence of the poet's message to mankind. The poem is a trumpet-call to humanity that all men are equal and that is the intrinsic worth in a man that counts and not his wealth or social status. 'The man' was to him 'the gowd' and his rank 'but the guinea stamp.' And what sublimer thought can be found for the solace of mankind than that which is contained in the following lines?

'What though on hamely fare we dine,
Wear hoddin grey, and a' that;
Gi'e fools their silk, and knaves their wine,
A man's a man for a' that;
For a' that and a' that
Their tinsel show, and a' that;
The honest man, though e'er sae poor
Is king o' man for a' that.'

And Burns is not without hope that the old-world distinctions in the race of man based upon rank, birth, or wealth are bound to die out and piously looks forward to the day when

'—sense and worth, o'er a' the earth,
May bear the gree, and a' that,
For a' that, and a' that,
It's coming yet, for a' that,
It's coming yet, for a' that,
That man to man, the warld o'er,
Shall brothers be for a' that.'

K. Venkatappayya.

Nellore

Editorial Notes

The Place of Science in Education

The importance of science has increased so rapidly during the last half a century that it behoves us to examine the place that it has come to occupy in organized education. The advances have been within an extraordinarily large area, involving physical, biological and social sciences. We live in a world that is becoming more and more mechanically calculable and physically manipulable. Biological experiment and hypothesis have taught us the unity and developmental character of all organic life. Analyses of social processes and tendencies has served to emphasize what the biologists are saying. The upshot of all this movement has been the achievement of a new approach to the problems of life. It has become necessary not only to rewrite history, but to revalue art, to reinterpret religion, and to re-examine our entire philosophy of conduct. With some people the scientific method and approach has become a passion, almost a panacea for all the ills of life. They see no limits to its possibilities. The keys that will unlock for humanity all the mysteries of the universe are in its keeping. The needs of which we have been made conscious by scientific progress can only be met and satisfied by more science.

There are two senses in which we employ the term 'science.' One is as a body of knowledge; the other refers to a method. The inordinate credit that is being given to the sciences, and the extravagant hopes that have been associated with them in certain quarters is due to thinking of science in terms of content. Science is a concept that stands for precision and thoroughness in the matter of its conclusions. Consequently when a man with a reputation as a scientist ventilates an opinion, there are many who are prepared to accept it as authoritative. The curious thing is that they will accept his dictum very often, even when he is speaking on a subject outside the realm of his particular science. If a man earns the right to be heard as an authority in physical science, it is no reason why he should be considered able to speak *ex cathedrâ* on psychical phenomena. The sciences have contributed so much to the sum total of our exact knowledge about ourselves and our environment, human and non-human, that some are being stampeded into thinking that it is only a matter of time until its conquests are complete. A universe, completely explicable in terms of science, is the goal to which they look. Until the dawn of that glorious day, religion and art may have a place in helping us to fill up the gaps, but when the gaps finally disappear religion and art will fade away, and science will shine by its own splendour.

It is not necessary to pause over the improbability of that morning of scientific omniscience ever dawning. It is more important to note that, even if its fond hopes were realized in respect to filling up all the breaches in our knowledge, there is no hope of its meeting all the needs of human life. There are other things that we need to have done for us than what the sciences are able to do. Science abstracts, analyzes, classifies, explains, measures and effects methods for mechan-

ical manipulation and control. And all of these functions are exceedingly important for human welfare as well as for purposes of exact knowledge. Religion and art have arisen and function for us in the realm of appreciation, interpretation, evaluation, and social enjoyment. There are other things that we want to do with our environment that are quite as important as measuring and explaining. The Taj Mahal means what it does for us, not because any one has made an exact calculation of the stones and cement that entered the structure, though that is scientifically quite possible; its meaning is in terms of beauty and aesthetic response. The meaning of God in human experience cannot be determined by all the calculations of a Newton or an Einstein as to the size of his universe, nor yet by measurements of religious emotions in men. God must be needed, felt and lived with, to be known. He dwells in the realm of our values rather than our measurements. In other words, a mechanistic philosophy can never satisfy because it leaves out of account important phases of experience, and therefore gives a fragmentary interpretation only.

It is not an exaggeration to say that the second use of the concept, science, that is in the sense of a distinctive method, is the more important from the point of view of education and culture. The educated man must be scientific in the sense of having acquired a method for approaching problems and examining facts rather than in the sense of having built up a structure of knowledge. The aim of the scientist is to analyze and weigh data so as to be able to form judgements that will be independent of the idiosyncrasies of individuals. To the extent that the feelings and prejudices of the individual enter into a judgement, to that extent is that judgement jeopardized for scientific purposes. The scientist must decrease that science may increase. We know that it is psychologically impossible to eliminate the feeling element from any fragment of experience. Yet we insist that judgements that are emotionally motivated are liable to be unsound and invalid. The scientific attitude or temper consists in the habit of analysis and classification of facts, and an observance of their sequence and their comparative significance. This is the temper that should govern operations in the vital as well as in the physical sciences. It is humanly possible to keep the feeling element at a minimum, because the scientist is never dealing with living materials, but always with abstracted facts—dead facts, if you will. They may be facts abstracted from his observations of the behaviour of living people, but the facts themselves may be manipulated without emotion and without prejudice. It is the habit of forming judgements in this temper that has led us to place so high an estimate on the scientific judgement. We believe that an educated man should be dispassionate enough to form judgements that can be characterized as scientific, even though he has no detailed knowledge of the findings of the sciences. A system of education that fails to put students in possession of such a method and to develop within them such a temper has failed, in so far forth.

It is appropriate to re-iterate in this connection that the goal of the educative process is a free and well-poised personality. That which contributes the most to that end from the sphere of science is not a body of results which can be repeated

parrot-like on appropriate occasions, but a method and a temper that will enable the person to face situations, struggle with problems, and formulate judgements with fairness and precision. The view that education should turn out scientists is cribbed and provincial. It is a vastly different thing to insist that a true education should impart the scientific temper. The former is as impossible as it is undesirable; the latter is both possible and desirable. The legend, 'Science for science' sake' serves to drive home the lesson of impartiality and love of truth. But 'Science for the sake of life' is much nearer the goal of an educative process.

It is a legitimate question for us to inquire to what extent our educational system in the Madras Presidency is scientific. Which of the two meanings is dominating when we talk about science in this University? An analysis of the prescribed courses of study makes it clear that the idea of science as knowledge-content has been largely dominating the notion of science as method and temper of mind. Some of the courses have been so heavily loaded that the emphasis has to be placed on the accumulation of facts to the disadvantage of the acquirement of a method. Instruction and examination alike have been more concerned with *what* a student can do than they have with *how* he can do it. Memory performances, one might almost say 'memory stunts' come first; creative thinking comes last, if it gets the chance to come at all. The human receptacle that can contain the most knowledge receives the laurels, while the mind that can wrestle best with a problem fails 'unwept, unhonoured and unsung.' This state of affairs is particularly obvious in the science courses themselves. We in this University have been tempted to neglect the fact that there ought to be a difference between a B.A. course with a science or a group of sciences as optional subjects, and a B.Sc. course, with the result that the Madras B.A. in the Science groups approximates very fairly to B.Sc. courses in some other institutions. Such a policy errs on two sides, that is on the side of science itself, and on the side of education. There is a very grave danger that men who have to do so much science in their undergraduate work will develop in an unbalanced manner. Our B.A. course in the Science groups are suffering on the side of broad cultural value, and many of the men who take them, though they possess a good deal of technical knowledge about some subjects, are regretably ignorant in other fields about which any college graduate ought to have at least a working knowledge. On the other hand the courses are so framed that they do not admit of students taking enough to get a survey of a science and acquiring the method of science unless he is prepared to go all the way. It is the evil that attends too early and too much specialization. It is quite true that detailed and careful experimental work in a science is the best way of discovering how it works. But the trouble with some of our courses is that students cannot see the trees for the woods. They learn to ask 'What?' They ought to be even more concerned to know 'How?' In the remodelling of courses, there is much to commend itself in the plan of a general cultural course that will give a student some knowledge of history and economics, some of philosophy, some of literature, and enough of the sciences to get a survey of their fields and to understand their method of working.

We beg to submit that a scientific education is something more than an

accumulation of knowledge about scientific facts and theories. To be scientific means to be impartial, to have a mind that is receptive to truth from any quarter, to recognize all the facts in any situation in their own right and on their own merits. If this contention be valid, nothing could be more unscientific than to propose a system of education that denies the legitimacy of art and religion. How much place are we according to the aesthetic side of culture in our educational system? The answer is, Some through the medium of literature, and precious little other than that. India has a great heritage on this side of her life—poetry, prose, sculpture, painting, music, etc., but our present system of education is doing very little either to assist the student to appreciate his national heritage or to inspire him to make any contribution to it. It is not a paradox to assert that an education that denies a place to religion is unscientific; it is unscientific because it is partial. Thère are fundamental human needs, the need for more-than-human help in the struggles and perplexities of life, that can never be satisfied in any other way than by religious experience. We claim that a scientific education is one that recognize that religion occupies an integral place in life. By making religion a part of the education which we in this College offer to the students of Madras we are not treating it is an *extra*, but as an *essential*. An education that neglects the demands of the religious consciousness is to that extent narrow and ill-balanced. The scientific temper should lead to a recognition of the rights of religion in human life and in the educative process, for the precise reason that it does something for us that we cannot get done by any other means. Religion preserves for us the consciousness of the ideal without which no education would be complete. It gives meaning and worth to human undertakings, raising them to a cosmic level. It imparts motives and releases energies that give scope to personality to develop according to its maximum capacity, which is the goal of education.

Sir George Paddison. At the meeting of the College Council which was held in November a minute was passed placing on record the sense of loss which the Council has sustained through the death of Sir George Paddison. In this the College Council was far from being alone. In every part of the presidency similar resolutions have been passed. And what is most remarkable is the diversity of bodies from which these expressions of regret have emanated. From church and state, from the educated and from the outcast, they come. On all Sir George had impressed himself. Official rules were never suffered by him to become fetters; where a matter had to be dealt with he dealt with it, throughout his entire service, as a human being. Of his Christian faith he made no secret: into the duties of a lay trustee he threw himself with zeal; and on one occasion he began the preparation of candidates for confirmation. One of the most virile and stimulating addresses of a religious nature which we ever read was an exposition of the Fifteenth Psalm—the Gentleman's Psalm—which Sir George gave to the children of the St. George's Homes. Deep sympathy devoid of all sentimentality and accompanied by intellectual keenness marked all that he did. He was in his element when he was seeking to end a strike, and with employer and employee he was equally at home. To the ryot and the depressed he gave of his best. His presence and advocacy brought new hope to the downtrodden. He

was a champion all his days. So it was when he went over to South Africa, and there created an atmosphere of goodwill in which all the negotiations were carried on until they came to a triumphant conclusion. We were struck with the warmth of the terms of appreciation used by the Right Honourable Mr. Srinivasa Sastri as he described to us in conversation what the Indians in South Africa owed to Sir George Paddison. Along with the downrightness of all his dealings, his unflinching honesty, and his unfailing industry, there went a perennial sense of humour. Difficult situations yielded to it when they would not yield to logic. To every one who had a disability, educated or uneducated, Sir George was a loyal friend. And there can be little doubt that the work which he did with such energy on behalf of the depressed and the badly treated both in India and South Africa hastened his end, and deprived us of a man whose sterling life and telling work we can ill spare.

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Educational Legislation. A party in power must justify its existence by what it does, and chief among the things that it does is the legislation which it passes. Acting on this generally accepted principle, the present Ministry has set itself to bring before the legislature several measures, and some of these relate to education. It has said that it intends to bring in a bill amending the Elementary Education Act, and bills to amend the Andhra University Act and the Madras University Act have been introduced into the Council, and are now before Select Committees. When we look at what is being done we cannot help asking ourselves the question, Is educational legislation dependent on party politics? There are certain facts which seem to lead to an affirmative answer to this question. For instance, all the acts which it now proposed to amend are recent acts. The Elementary Education Act was passed in the days of the unreformed Councils, but it came into force only in 1921; the Madras University Act became operative in 1923; and the Andhra University Act in 1926. It might seem on the face of it as if when a party got into power it looked round about to see what work of its predecessor it might improve. In the present cases, however, change of government does not account for the changes in legislation which are now brought forward. During the years which have elapsed since the passing of, say, the Madras University Act the government, as is well known, have been collecting opinions as to the working of the Act and as to the way in which its working might be rendered more satisfactory. The present amending bill is largely, though not wholly, the outcome of this careful attention which has been given by government to the Act since the day of its passing. Our question, then, in the present instance must be answered in the negative. And we may be glad that such is the fact. For education is not a party subject; it affords one of the opportunities so welcome in political life where all parties may combine. But granted that for the present educational policy is not dictated by political exigencies, is there anything which will secure that this may not happen? In England there is always the Board of Education to stand between the country and the whim of ministers in matters educational. Is there anything corresponding to this in our own presidency? We are not

sure that there is. It may be said that there is the Educational Department, with the Director of Public Instruction at its head. That is perfectly true. But what is the relation between the Director and the Minister for education? As far as any one can see from the outside there is no nexus. The Minister has it in his power to utilize the department for the furtherance of the objects which he has in view; for aught that those of us who are not in official circles know there may be plans and matters of policy originating in the ministerial office which do not appear at the departmental office until they have been decided on. This is, of course, only a possibility. And our position is that such a possibility should not exist. The Minister is in office to-day, he may be out of office to-morrow. The educational department is a permanent body. It contains those who are in constant touch with education and its administration. It is the one competent bureau of educational information which exists in the presidency. The officer who is at its head has at command his own experience and that of a number of able educational officers which he can collect on any subject in the shortest possible time. Surely there should be in the constitution, or in the rules of administrative procedure, some method whereby the Ministry and the Department might have a clearly defined relation. This is a matter not merely of departmental or ministerial interest. It concerns all those who have a stake in the education of the country. Until this relation is definitely stated and recognized there is always the chance that educational legislation may be political legislation. And we should think that every minister would be anxious to avoid any such imputation. In certain administrations the Director of Public Instruction has been made a secretary to government, and serves at once to provide the needed connexion. But whether by this means, or by means of recognized conventions, the relation requires to be established in this presidency. The absence of it will always give to those who have a vital interest in education a certain sense of insecurity. It would be fitting if our present Minister whose knowledge of, and work for, education is well known could see his way so to define the relation of ministry and department that education would emerge as a gladsome oasis amid the welter of conflicting political parties.

Government Colleges. What is to happen to Government colleges? There seems to be good reason for returning to the consideration of a matter which was referred to in the pages of the last issue of the Magazine. In the course of what was said there on 'Control and Management in Indian Education,' attention was drawn to a suggestion regarding the management of government colleges. Since that was written a committee of the Senate of the Andhra University, as reported in the public press, has expressed itself in favour of the transfer of the colleges within its area which are at present under the management of government to the management of the university. And to judge from the same reports, the Senate has adopted the report of the committee. If the record is in accordance with fact, and so far there has been no contradiction of it, it comes to this that an affiliating university in South India is in favour of undertaking the management of certain of the colleges of which it is composed. Recently, too

resolutions have appeared on the agenda of the Senate of the Madras University which would, if accepted, have the effect of making that University the manager of certain of the colleges which are under its control. These resolutions have appeared on the agenda, but the multitude of items for consideration has been so great that they have not been reached. It will be interesting to know the attitude which the University of Madras will assume to such proposals. But the matter is of far more than academic interest. It has a vital bearing on education. It raises questions of equity, competence, and the whole relation of control and management in education. (1) To begin with, there must be a definite answer to the question: Should the controller of all the colleges which constitute a university be also the manager of a certain number of these colleges? The experiment of combining the control of education in general with management of particular institutions has been tried. It has been given a very long time of trial, and no one who looks over the story of the past seventy years, who examines budgets, representations to government, and reports of commissions, can possibly come to the conclusion that the experiment should be continued. The body which is principally concerned has itself come to this conclusion. The State has withdrawn from the management of elementary schools in this presidency and it has quite clearly enunciated a policy in regard to secondary education which will eventually issue in the same result. Control and management, combined for two generations, are now being separated. The experiment, justified in the circumstances which originated it, is being abandoned in the light of experience and of the changed circumstances in which education now finds itself. Certainly the experiment gives not the slightest ground for the belief that education stands to benefit by its extension. Even as a temporary makeshift the combination of control and management utters a warning in tones which no one who cares for the spread of education in this presidency can afford to ignore. Let that warning ring in the ears of all who are engaged in considering this vital question. (2) But while the general aspect of the matter claims fuller treatment than space will permit, there is another aspect which requires the most serious consideration. It may be stated in the form of this question: Is an affiliating university a body which can do justice to all the interests which it represents by combining control and management? The only answer to this must be an emphatic, No. A unitary university (in the strict sense of that term), combines control and management; but no affiliating university can dare to do that. The moment that it assumes management of a college it has a peculiar interest in that college. It is bound to have, otherwise it could not be a good manager. But if it has an intimacy of relation to one of its affiliated colleges which it has not to the other colleges which are affiliated, it becomes at once a suspected, and therefore a bad, controller. If an affiliating university wishes to be a good controller it must have nothing to do with management; if it wishes to be a good manager it must abandon control. (3) There is a further practical question: Is the Syndicate of an affiliating university the body best calculated to discharge the function of management? I do not presume to give any but a

personal answer to this question. I have had considerable acquaintance with the working of the Syndicate of the University of Madras, and with the almost interminable duties which fall to the lot of one who is a member of that body. I know my colleagues too, and count myself fortunate to be associated with men so devoted to the interests of the University, so unflagging in their labours, so valuable in the work of administration. But I should be sorry if we were asked to add to our present duties that of being the managers of a college. Various reasons might be adduced; but one will suffice. We are overburdened as it is. If a college is to receive the benefit of what a satisfactory management implies it must have as that management an *ad hoc* body. (4) And that brings me to a final consideration. If government divests itself of the responsibility of managing a college it cannot divest itself of the responsibility of entrusting that management to the body which is most competent to discharge it. Everything points to the conclusion that the time has come for government to transfer its colleges to bodies of trustees specially appointed for the purpose. It may be asked why I, who have spent more than thirty-four years in the service of none but an aided college, and who have never been slow to express my belief in the value of aided education, should take up a position with regard to the management of colleges maintained by government. My answer is that I regard all forms of educational activity under whatsoever management they may be conducted as forms of national service. I know what has been done in government colleges, and I have known for more than a generation those who have taught in them, Indian and European. And I have a strong desire that these colleges which are a testimony to the fostering care which they have received, and to the able men who have taught in them, should continue, under a change of management, to maintain unimpaired the position which they occupy as educational centres. They are needed and they should continue their work in the educational system of the country. Change of management is necessary both to avoid the unworkable combination of controller and manager, and to give to government that position of an unencumbered controller of the whole system which will redound to the advantage of education as a whole. But it is almost unthinkable that government would entrust this management to any body which will combine with it control, and will thus from the first lay itself open to the charge of being a partial controller, or would hand it over to a body which was so overburdened with other duties that it would lay itself open to the charge of being an indifferent manager. The country needs that these colleges should be under the management of trustees specially appointed who will see to it that the labours of many years and skilled workers are conserved, and that the country reaps the full benefit of institutions which are of truly national service. The interests of the presidency as a whole require that such a step should be taken, and that it should be taken very soon.

W. MESTON.

The University Amendment Bill. A Bill to amend the Madras University Act of 1923 is now before the Legislature. We may mention some of its main

provisions; there is no need to detail them, for a Bill may emerge from the hands of the Select Committee which examines it in a very different form from that in which it went before them. There are four main directions in which it is proposed to amend the Act. First, it is sought to increase provisions. We may mention, for example, the recognition of Oriental Languages among the Faculties, the appointment of the University librarian to the Academic Council, the approval (not merely the passing) of university marks by the Syndicate. In the second place, powers are defined more clearly than was done in the original Act. This has come about as the result of experience and is much needed. Sometimes on the Senate agenda, for instance, one could not help noticing the number of resolutions brought forward which dealt with strictly academic matters and should have found a place in the business not of the Senate but of the Academic Council. The third direction which amendments take is that of reducing the numbers on the university authorities. The Senate has now almost two hundred members; and most people feel that for the carrying on of business this number is too large. The Syndicate is the executive of the university, and it is for consideration whether for this purpose a membership of nineteen is necessary. The fourth line taken by amendments is that of simplifying machinery. It is proposed to abolish the Council of Affiliated Colleges. A fuller representation of the affiliated colleges on the Academic Council is provided for in the Bill, and in this way it is believed that all the duties of the Council of Affiliated Colleges will be adequately discharged and the interests of the affiliated colleges fully safeguarded. It seems to us that the Bill, while keeping to the fundamental provisions of the 1923 Act, suggests amendments which are in harmony with the spirit animating that Act, and which will have the effect of rendering its working smoother and more effective.

THE SENATE AND THE BILL. The Bill was considered by the Senate which gave almost three days to the matter. The amendments to the Bill covered almost fifty pages of the Senate agenda. With so many amendments tabled we should have expected a very large attendance of members. For some reason or other this was not the case. One poll which was taken showed the voting to be 33 for and 28 against. When it is remembered that the total membership is 188, the number of those who attended gives rise to many questions. We think it may well be that those engaged in teaching find it hard to be present at the numerous meetings which the University now holds. Principals and members of college staffs are becoming restless under the demands which the University bodies are making upon them. They feel that their students are suffering. The position certainly requires attention. Before we leave the subject of the recent meeting of the Senate we note with satisfaction the tribute which Mr. Ramunni Menon, who was officiating as Vice-Chancellor, paid to the Registrar and his office for the expeditious and clear manner in which the preparation of the business was carried out by them. The agenda list was certainly a model, and to have got it ready in so short a time must have meant several long days and short nights to the Registrar. In common with other colleges, all sharing in the benefit of the business-like procedure of the University, we join with Mr. Ramunni Menon in our hearty thanks to the Registrar and his staff.

What Men Think

The Union of Christendom

Church unity as it is usually portrayed is described in a recent number of *Harper's Magazine* as 'a will-o'-the-wisp which Christians will forever chase but never reach.' The author of the article, the Rev. Herbert Parrish expresses astonishment at the repeatedly and insistently expressed desire that such a union should take place. When one considers all the cultural, racial, intellectual and theological divisions that are represented within the Christian fold, it is obviously a much greater task than some would-be idealists have supposed. Mr. Parrish assures us that church unity is a counsel of perfection, like communism, where men are as the angels of God. 'To attempt a synthesis of the extremes of recognized theological positions, to unite in a single authoritative body the churches, is a dream similar in kind to the schemes to eliminate poverty, to create a universal language, to destroy capitalism, to perfect governments, to make democracy safe for the world, to determine taste, to reach Utopia.' It is the opinion of this writer that little has come out of the Lausanne World Conference on Faith and Order, except the reiteration of a few platitudinous expressions about agreement on ultimate truth or some other harmless topic. There has been so much superficial talk about this matter that it is rather refreshing to find a writer who recognizes some of the practical difficulties and faces them frankly. In the United States there are about two hundred varieties of Christianity which include all sorts of insignificant and fanatical sects as well as the main divisions such as Episcopalians, Presbyterians, Baptists and Methodists. To bring them all into organic unity seems an unsurmountable task, especially those whose strange customs are reenforced by fanatical zeal. Now-a-days a new line of division has emerged into modernists and fundamentalists whose differences, are, in the opinion of some, more radical than those between Catholic and Protestant. Another difficulty that seems to be almost totally lost sight of by most of those who advocate union is the psychological one. People's minds do not run into such conformable moulds. The differences of temperament, attitude, motive, emotional appeal, intellectual acumen, and overt habits are grounded in human nature itself, and can never be overcome by organizations. It is perfectly true that some of things that divided our fathers a generation ago cease to interest us, and some of our divisions are meaningless survivals. But even if all the old breaches were healed to-day, more than likely others would appear to-morrow.

But there is another side to the story. It is more than obvious that the Christian world is divided far more seriously than it would be if it were as devout in following its Master as it should be. The endless divisions are in some measure the outcome of getting away from the simple straight-forward teachings of Jesus, and setting up theological and ecclesiastical interpretations as

standards. The result has been in many instances a wrong emphasis. To be sure there is far more unity among Christian peoples than some of our advocates of organic union seem to be ready to admit. An undertaking such as this College in which a number of different bodies of Christians are united is much more significant than the fact that the representatives of these groups hold church membership in different places. Here we see the practical phase of the unity of Christendom in all that is essential as well as an attitude of charity in regard to our minor differences. The things on which we are agreed are so important that we almost forget most of the time that there are also some differences among us. Union of an organic nature may not be feasible; unity of a spiritual character is both possible and practical.

Cannot something be done to achieve a closer-knit unity in matters of organization and practice than at present? That is the question that is disturbing a great many leaders in all the prominent Christian groups. Whenever proposals are made there are certain difficulties that stand in the way. The basis for church membership is one thing. Shall there be a doctrinal demand made of all? Or will it be a sacramental condition that must be imposed? Another difficulty arises from the Roman and Anglican claims to an apostolic succession in the episcopacy, and the Romanists will not even recognize the Anglican claim in this matter. The Rev. H. R. L. Sheppard, the former virile vicar of St. Martin-in-the-Fields discusses the issue with unusual frankness in a recent volume entitled *The Impatience of a Parson.* Though he is himself an Anglican clergyman of many years standing, he does not hesitate to call upon the leaders of his own communion to face the facts in a spirit of fairness and liberality. He believes that if, at the next Lambeth Conference of bishops that is scheduled for 1930, the leaders of the Anglican church should make real overtures to the Free Churches including an abandonment of their claim to apostolic succession, a recognition of each other's ministry, an abandonment of any demands on those seeking church membership other than an assurance of their desire to follow Jesus Christ sincerely and devoutly, they would be met by a hearty response from the leaders of the Free Churches, and the way would be opened for real progress in the direction of church union. It must be acknowledged that Mr. Sheppard has proven himself to be a fearless thinker and leader. He has thrown down a challenge which it is to be hoped will not be allowed to go unheeded. It comes, one is bound to feel, from a man of deep conviction who really believes as he writes that, if something is not done to remedy this state of dividedness, the Christian church is going to fail to rescue an already tottering civilization.

The Meaning of Karma

Most ethical and religious concepts undergo change and development with the evolution of human thought. This fact alone is sufficient to account for differences in the interpretation of *karma* which have appeared from time to time. The concept itself has a history which it would be folly to overlook, a history that finds roots in the Vedic doctrine of *ṛta*, and its culmination may we not say in the future?

Critics of karma have reminded us sufficiently often of its mechanistic tendencies, and doubtless in some interpreters it has been so understood. Hopkins, among western scholars, has shown an appreciation of its ethical import in reminding us that it stands for a faith in cosmic justice, rewarding virtue and punishing vice with the unerring 'fruit of the deed.' Though it seems to operate mechanically, nevertheless it is intrinsically ethical, since all of its rewards are for the good and all of its punishments are for the evil. In *The Hindu View of Life* Professor Radhakrishnan has given us the interpretation which a thoughtful Hindu holds of this much discussed and perplexing doctrine. He finds no antithesis between karma and freedom because he regards it not as a mechanical principle but as a spiritual necessity. 'It is the embodiment of the mind and will of God. God is its supervisor Karmādhyakṣaḥ.' The doctrine is a reminder that divine laws cannot be avoided, that they are not external impositions but laws of our inner nature.

Critics have sometimes urged that karma leaves no place for repentance, because God has abdicated in favour of his immutable law. To be sure the Hindu who believes in the doctrine cannot regard prayer and spiritual exercises as magical means for the attainment of spiritual or other results. Faith in karma is faith in the truth, justice, constancy and mercy of God. 'Forgiveness is not a mitigation of God's justice,' says Professor Radhakrishnan, 'but only an expression of it.' Spiritual growth and experience are not determined in a haphazard fashion, but are governed by regular laws. The implication of the author seems to be, though he does not state it in so many words, that forgiveness would be the expression of the nature of God in response to one who is repentant of his sins. Some of us have been unable to find any place for forgiveness in consonance with karmic justice, and it is exceedingly interesting to find how a thoughtful Hindu makes the reconciliation. If that be the real meaning of the concept, we shall not have the quarrel with it that would be inevitable if it left no place for the exercise of forgiveness of sins.

What about freedom? Certainly some interpreters make it very difficult to understand how the individual could be a free moral agent. Not so with Radhakrishnan. Karma determines one's past, but it allows that the future is only conditioned. The analogy which he is uses is that of a game of cards. 'The cards in the game of life are given to us. We do not select them. They are traced to our past Karma, but we can call as we please, lead what suit we will, and as we play, we gain or lose. And there is freedom.' Perhaps some critics will object that this is not a true historical account of the meaning of karma. Even if that be the case, there is no reason why a thinker of to-day may not re-interpret the doctrine to harmonize it with present needs and present knowledge. Such a procedure is both natural and legitimate, and deserves to be commended.

If We have Life, Do we need Philosophy?

This is the arresting title of an article contributed in a recent number of the Journal of Philosophy. One would think that philosophy had sufficiently indicated its right to exist by the sheer fact, to speak of nothing else, of its having survived

through the centuries. It seems certain that if philosophy supplied no fundamental need in human life, it would long ago have met its deserved end. But this is not always remembered, and one hears on all sides. 'If we have life, do we need philosophy,' as though it is possible to have life, and a life worthy of rational beings, without any reference to philosophy. It would seem wholly unnecessary to justify the pursuit of philosophy but for the fact that such questions as the above are constantly on the lips of people otherwise worthy of respect. In all fairness to the writer of the article mentioned above, it must be stated that she herself answers the question she raises, in the affirmative.

Professor L. T. Hobhouse in his address before the annual meeting of the Institute of Philosophical Studies last July lays down very clearly what that aim and function of philosophy are. He says that philosophy deals with the one problem of man in his life and his position in the universe, i.e., that it seeks to give a rational account of the universe taken as a whole. The sciences consider the universe in bits, and adopt certain assumptions which it is convenient for them to adopt to gain the best results in their several departments. The need is for a science, viz., philosophy, which will examine the assumptions which the special sciences take for granted, and what is even more important, will supplement the work of the sciences by giving a view of the universe, not in its bits but as a whole. The need for philosophy obviously grows as specialization advances, for the danger of specialization is that we should fail to see the wood for the trees, that we should get so close a view of things that we are unable to see them in their proper perspective. This danger is what philosophy seeks to avert.

The task of philosophy as Professor Hobhouse indicates, is an inexhaustible one, for as the sciences advance, new material is ever increasingly coming in and it is always the task of philosophy in each age and generation to give a view of the whole in the light of that material. But the problem at heart is essentially the same as was that of our ancestors, viz., to gain a comprehensive view of the universe, and just because it is the same, philosophy seems to many a profitless venture, ever discussing the same time-worn problems and never reaching a final solution. 'There is a certain sense of hopelessness with which many turn from philosophy, urging that the philosopher is hammering away at the old questions with the same hammer, trying to drive in the same nails, but that they only get a little blunter by the experience of the hammer in the hands of successive generations.'

Nevertheless it must be admitted that to rest content with the work of the sciences is unsatisfactory, for we need a comprehensive view of what the sciences reveal in bits, and in spite of all discouragements we need in each age to gain what knowledge we can of the universe as a whole in the light of the developments of that age. 'That is the situation which we have to keep before ourselves. We must endeavour to get the best general view of knowledge and experience that is possible. It is always worth while trying to bring together the new lights that come, trying to work into relation the many exceedingly divergent branches in which knowledge has already been pursued with great success, and trying to see some sort of intelligible pattern, some sort of fruitful result of the whole thing' That is the philosopher's task. It is difficult. 'However, it is worth the

attempt, and it is in the hope that this attempt will go forward and succeed, and in the belief that whatever the future may be, the task of making knowledge coherent for our own generation (and thereby helping to make our lives healthy, sane and reasonable), is worth doing, that the study of philosophy can be of exceptional value.'

The Colonization of the Polar Regions

The subject of Dr. R. N. Rudmose Brown's presidential address to Section E of the British Association was 'Some Problems in Polar Geography.' In the course of his address he dealt with the question of the settlement of Polar Lands. He stated that it is a geographical axiom that the herder must always give way to the tiller, and that there is little liklihood of any considerable areas of temperate lands in the long run being left to pastoral pursuits. The Arctic tundras, however, are entirely unsuited for agriculture by unfitness of soil and shortness of summer, and in these regions the farmer can never displace the herdsman. According to Stefansson, the Arctic tundras are capable of supporting about, 1,000,000,000 reindeer and perhaps five times as many musk-ox. Dr. Brown is of opinion that all evidence points to the conclusion that the white races are unsuited to the tropics and permanent racial transference thither on a large scale is not likely to come about. This means that, owing to pressure of population, the white races will in time have to turn polewards in their search for new homes. The only example of real Arctic colonization that exists is that of the old Norse colonies in north west Greenland founded in the tenth century. Late in the sixteenth century, after contact with the rest of Europe had long been broken, both colonies were found to have entirely disappeared. Recent Danish researches at Herjolfsnes near Cape Farewell have shown that these Norse maintained their racial purity and were not exterminated by Eskimos. On examination of the churchyards, it was found that all skeletons of those buried during the fifteenth century showed signs of rickets and there were a very large proportion of remains of infants and young people, indicating clearly that the colonies perished by exhaustion. Under modern conditions of transport, a plentiful supply of varied food could be assured and the frequent arrival of fresh immigrants would prevent continual inbreeding, and so there is no reason to suppose that modern colonists would meet the same fate as the old Norse ones. Dr. Rudmose Brown thinks that the Nordics alone show that distaste for gregariousness and that capacity for enduring solitude which are essential for the task. He foresees a time, probably not more than a hundred years hence, when Arctic Canada, Siberia, Greenland and Spitzbergen will have populations of prosperous though scattered colonists and their fur farms here and there supplying high priced furs in limited numbers. The outer parts, those without tundra and the ice-covered seas and lands, must apparently remain deserts visited only by roving hunters and occasional explorers.

Thyroxin

It has been known for some years that many of the physiological activities of the body are controlled by chemical compounds secreted by the ductless glands,

and that many diseases are due to deficiency or excess of these substances. The subject is one of very great interest and much work has been done by bio-chemists with a view to the isolation and synthesis of these bodies. The first of these compounds to be isolated in a pure crystalline form was adrenalin, the active substance secreted by the suprarenal gland whose function is the control of the pressure of the blood. This was done by Takamine about 1900. The substance has a comparatively simple chemical constitution and methods were soon found for producing it artificially. Synthetic adrenalin is now an article of commerce.

The thyroid gland produces a substance having an important influence on metabolism and growth, and extract of thyroid gland is extensively used in modern medical practice. Some years ago the active substance, thyroxin, was isolated in a pure crystalline condition by Kendall. It was found to be a somewhat complex body and several alternative formulae were put forward but confirmation by synthesis was lacking. During the present year C. R. Harington has succeeded in synthesizing this compound and has thereby established the structure put forward by him—$HO. C_6 H_2 I_2. O. C_6 H_2 I_2. CH_2. CH (NH_2). COOH$. This synthetic product has been found to be identical in physiological action and chemical properties with the natural product.

Book Reviews

Indian Philosophy. By S. Radhakrishnan, M.A. London: George Allen and Unwin, Ltd., 1927. Pp. 797. 25*s.*

In the Magazine for January 1924 we had the pleasure of reviewing the first volume of Professor Radhakrishnan's admirable work. Now it is our genuine privilege as a College to congratulate him on the completion of the work. The second volume maintains the high standard of scholarship and expression that was set in the first. If anything the material is more compressed, so that the study of it demands closer scrutiny. In addition, we are introduced to that period where subtle distinctions arise involving the use of technicalities and Sanskrit terms that make careful study a slow process. Nevertheless one feels amply rewarded for the time spent.

The first volume presented accounts of the Vedic period, the Upanishadic philosophy, Buddhism, Jainism, the Epics and the Bhagavad Gita. It affords therefore an indispensible background for the present volume which is devoted in the main to an exposition of the six systems of orthodox thought. The expositions given include not only positive descriptions of the distinctive doctrines of each of the schools, but illuminating comparative notes on the relations between the various schools as well as parallels and divergences between Indian and European thinkers and their doctrines. The entire work is an indication of a prodigious amount of labour and of an exhaustive acquaintance with the spheres of thought under discussion. It is a contribution to Indian philosophy which will have to be reckoned with by future scholars, and is bound to be well received by all students of the subject. Some of the more recent works in the field have gone more into detailed reference to the Sanskrit sources, but certainly no one has written with the philosophic acumen and understanding that characterizes our author. Furthermore, as we pointed out in reviewing volume one, no present writer is doing more valuable work in assisting East and West to come to a mutual understanding and appreciation of each other's best thinking.

Professor Radhakrishnan is particularly successful in showing the interconnectedness of the various systems. Data is not available for accurate chronological information, so that in the ordinary sense of the word, a 'history' of Indian philosophy is not feasible. But that defect is not so serious in philosophy for here logical connections are more important, and it is from this approach that the author shows the unity of the systems. They are related to one another as showing an orderly development of thought, supplementing rather than rivalling one another. The emphasis in the Nyāya is on logic, in the Vaiśeṣika on the philosophy of Nature, in the Sāṁkhya on psychology, in the Yoga on mysticism, in the Mīmāṁsā on ethics, and in the Vedānta on metaphysics.

The inter-relationship between the systems comes out also in the theses which

they hold in common. They are unanimous in accepting the Veda as authoritative and revelatory, and it was the refusal of Jainism and Buddhism to make this acknowledgement that resulted in their being branded as heresies, and prevented their complete amalgamation into the Indian system. The systems all believe in the immortality of the soul, and in the doctrines of *karma* and *samsāra*, though of course differences of interpretation emerge. According to all of them the wretchedness of life is due as much to ignorance as to sin, for ignorance as to our true nature causes bondage to things physical and material, and prevents *mokṣa* or release that can only come to the enlightened. On the side of *dharma* there is a unanimous acceptance of the principle of caste and of the division of the life of the twice-born into four stages or *āśramas.* In cosmology they agree to a succession of periods of creation and dissolution, alternating one with another in long cosmic processes. The life of man, like the progress of the universe, is in accordance with law and order, and on this, too, they are all agreed.

The Nyāya philosophy is described as a 'logical realism.' Its distinctive contribution to Indian thought is within the field of method, furnishing an organon for critical and scientific investigation. It mapped out the sphere of knowledge in its essentials, furnishing classifications and names that all the systems have appropriated. It has supplied a logical instrument for testing validity, and for discriminating between true and false inferences invaluable to all, since all of the systems accept inference. The positions of the Nyāya school were however not final, because they did not furnish satisfactory solutions of metaphysical and theological problems, and the Sāṁkhya and Vedānta, beginning one might say where the Nyāya left off, worked out more profound analyses of experience from the logical point of view. The Nyāya accepted the metaphysics of the Vaiśeṣika, and in fact these two schools are so closely connected that the names are often hyphenated as one. The metaphysics of the Vaiśeṣika is appropriately characterized as 'atomistic pluralism.' Its emphasis on negatives, on pluralism, and on atheism, together with its subjectivistic tendencies made it altogether an unsatisfactory system. Because of its failure to organize its materials into a coherent system, it was largely displaced by the Sāṁkhya and Vedānta.

The Sāṁkhya system, which Garbe regarded as India's most significant contribution to philosophical thinking, is a dualistic realism in which *puruṣa* and *prakṛti*, mind and matter are kept forever apart. Not only are *prakṛti* and *puruṣa* held as mutually independent, but the system believes in an infinity of mutually independent *puruṣas.* The dualism of the Sāṁkhya is not even transcended by a deity, for a belief in Īsvara tends to impede the rise of true discriminative knowledge. The truth that the Sāṁkhya thinkers expressed so imperfectly is that consciousness is not derived from any material substance of which it is a form of energy. This metaphysical dualism has similar epistemological defects. Since the concrete unity of experience is broken up into two elements of subject and object, fictitiously absolute, it is unable to account for the unity of experience. Metaphysically the Yoga system of Patañjali built on the foundations laid by the

Sāṁkhya, but transcended its dualism by a personal God who is the intelligence that adjusts the modifications of *prakṛti* to the purposes of each *puruṣa*. The Yoga holds that empirical knowledge is not absolutely valid, since it involves confusion between *puruṣa* and *buddhi*. Ultimate truth can only be gained by the practice of yoga discipline. It is in effect not unlike Kant's distinction between the pure and the practical reason. Our author concludes that to the modern mind, East and West alike, the Yoga is not much more than an elaborate system of self-hypnotization.

The Pūrva Mīmāṁsā is more practical than speculative in its interest, offering a critical analysis of *dharma*. Its philosophical speculations are mainly with reference to the ritualistic matters: It is 'frankly polytheistic, though by implication atheistic.' The contents of *dharma* are to be found in the Vedas which are eternal. In fact sound (*sabdha*) itself is eternal. Not much philosophic interest is attached to this school which does not concern itself with ultimate problems. The deficiency is made good in the Uttara Mīmāṁsā or Vedānta philosophy which is India's most significant contribution to reflective thought. It would be impossible to do justice to the author's treatment of this system to which about three hundred closely printed pages are devoted. Its doctrines, especially as presented in its two most famous representatives, Śaṁkara and Rāmānuja, are the most familiar of any. There are three distinct types of Vedāntism, the strict monism (*advaita*) of Śāṁkara, the qualified monism (*viśiṣṭādvaita*) of Rāmānuja, and the dualism (*dvaita*) of Madhva. Śaṁkara was undoubtedly the greatest thinker that India has produced, supreme as a dialectician, devoted to truth, calm in judgement, and tolerant to others. The western thinker that approaches to him most nearly is Bradley, and the author draws many parallels and distinctions that are illuminating. In summing up, he tells us that Śaṁkara was not blind to the mysteries of life and yet he had no hankering for mysteries for their own sake. And beyond them he gave the most rational account of experience of any Indian thinker. He gave to India 'a logical theism which does not slight the intellect, does not scorn the wisdom of the ages, and is at the same time the highest intellectual account of the truth.' But the Absolute of Śaṁkara, like that of Bradley in our own time, fails to satisfy the need of the religious consciousness. It is too rigid and impersonal to become an object of worship. Rāmānuja was like Śaṁkara non-dualistic, though with the qualification that he admitted plurality since the supreme spirit subsists in a plurality of forms as souls and matter. Further, Rāmānuja's system meets the demands of the religious consciousness since it is theistic. Indeed in the author's opinion he gave us the best conceivable type of monotheism, since he made such a noteable attempt to harmonize the claims of religion with those of logic. The view of Rāmānuja is 'the highest *expression* of the truth, though Śaṁkara would add that the real is something better and larger than our thinking has room for.' Moreover Śaṁkara allows that this type of theism is legitimate for practical life and religion. These two master thinkers, it is urged, are not to be taken so much as rivals as complements to one another. Whetever deficiencies may be found in the logic of Rāmānuja are more

than made good in the *advaita* of Śaṁkara: and whatever lack of religious appeal we experience in Śaṁkara is removed in the religious genius of Rāmānuja.

The author gives us a brief treatment of the Śaiva Siddhānta, Śākta, and Vaiṣṇavite theistic schools. Then in a concluding chapter he refers to the unitive character of the development of Indian philosophy, and expresses his regret at the evident stagnation that has characterized the recent past. He believes that, owing largely to intimate contacts with the West, a new spirit of creativity is in the throes of birth, and that India will make contributions to reflective thinking in the future worthy of her best traditions.

A. S. W.

Neo-Hegelianism. By Hiralal Haldar, M A., PH. D. London: Heath Cranton, Limited, 1927. Pp. viii+493. 25*s.* net.

Professor Haldar of the University of Calcutta has done a distinct service in bringing within the compass of a single volume studies in the British school of Neo-Hegelianism. It enables the reader not only to appreciate the debt which so many British philosophers of the recent past owe to Hegel, but also to see them in relation to one another, as representing the development of a particular phase of idealism. The method chosen by the author is to select representative thinkers, and to expound their principal contributions, with the exception that he has deliberately omitted the logical theories of Bradley and Bosanquet as being too intricate to admit of brief exposition. Though it does not claim to be an exhaustive study, the book indicates the principal developments that owe their inspiration to Hegel.

Professor Muirhead has defined the central truth of idealism as that knowledge or experience is a whole in which 'the two factors of subject and object stand in the relation of active inter-dependence on each other as warp and woof.' It is opposed to dualism in the sense of regarding mind and matter as two separate entities. Although all idealistic systems are agreed in interpreting the universe in terms of mind or spirit, there are a number of ways in which that mind or spirit is described, and it is within the sphere of this diversity of description that we find arising the various types of idealism. Hegel himself, of course, was an absolute idealist, his absolute being immanent in finite minds. Beyond that, we begin to encounter differences of interpretation of Hegel's own thought, the orthodox notion being that he intends a monistic view. It must be admitted that if one grants the thesis that nothing exists but spirit, that sounds very much like a monistic view of the universe. But Dr. McTaggart, whom the author has rightly included 'as an interpreter of' Hegel,' has offered the heteredox interpretation of pluralism as the real meaning of the man. Though nothing exists but spirit, it is a necessarily differentiated spirit. So then 'reality is a unity differentiated into a plurality (or a plurality combined into a unity) in such a way that the whole meaning and significance of the unity lies in its being differentiated into that particular plurality, and that the whole meaning and significance of the parts of the plurality lies in their being combined into that particular unity.'

It is not possible within the space of a review to note the distinctive contributions of all the philosophers whose work is expounded by Haldar. We shall have to be content with pointing out a few salient facts. He criticizes the idealism of T. H. Green as tending to represent the Absolute reality as timeless and statically perfect, the inclusion of finite minds within it being to him unintelligible. Green emphasizes the unity of the world, but Edward Caird carries the conception a stage further in depicting that unity as the manifestation of spirit. This is used as a basis for a very vital type of religious philosophy. Modern idealism in such men as the two Cairds rejects the view that God is apart from the world and stresses his immanence. 'The kingdom of God is within you.' Watson while emphasizing the doctrine of immanence is truly Hegelian in pointing out that the religious consciousness must presuppose the relative difference between the divine and the human minds while it at the same time acknowledges their unity. Mysticism and Deism fall into the opposite errors of obliterating the distinction between man and God, and of making their distinction absolute. It is rather interesting to note that Watson views personal idealism as incompatible with theism, while Prof. Geo. Galloway finds it the most satisfactory basis for theism. His argument is that if finite minds are mutually separate and also separate from God, it would be impossible to pass from self-consciousness to consciousness of God.

F. H. Bradley, as one would expect, is treated as the most brilliant exponent of Hegelian idealism in modern times. His conception of the Absolute is on the whole similar to that of Hegel. While in the main his doctrine is in harmony with that of Green and Caird, he has an original way of developing it. His predecessors attacked the problem largely from the point of view of epistemology, whereas Bradley's approach is more directly metaphysical. While Bradley distinguishes the God of religion from the Absolute of philosophy, other Neo-Hegelians such as Sir Henry Jones identify them, claiming that to accord anything less to God would be belittling. T. H. Green, on the other hand, had identified God with man's ideal self. Religion for Bosanquet was one of the means, along with art and philosophy, whereby the self can transcend itself.

The problem of knowledge is one to which modern philosophers are constantly recurring. The lines between the idealistic and realistic theories are not drawn nearly so sharply as they used to be. Modern idealism no longer advocates the subjectivism that reduces all knowledge to knowledge of passing states, and recognizes that in knowing we are in touch with real objects different from ourselves. Its main contention to-day is 'that the object is comprised and has a definite place within the circle of experience.' It is thus opposed to both absolute unity and absolute difference of subject and object. There is a touch of the instrumental doctrine in Sir Henry Jones' theory, for he holds that knowledge is the self-revelation of reality in thought, and that our thought is the instrument of that self-revelation. Bradley's contribution is that of degrees of truth and reality. Lord Haldane follows this up with an attempt to interpret philosophically the Einstein hypothesis of relativity. Knowledge is disclosed in degrees

and at different levels, in accordance with the concepts that it employs. The principle of relativity signifies that the degrees and orders of knowledge imply as determinants of meaning various concepts that are logically diverse, such as mechanism and life, instinct and intelligence. In some of the Neo-Hegelians, such as John Caird one encounters reverberations of the Kantian idea that some kinds of knowledge are disclosed by other than rational processes. There is a feeling element in experience, and a practical reason through the realms of which certain kinds of knowledge are attained.

A. S. W.

The Hindu View of Life by S. Radhakrishnan, M.A. London: George Allen and Unwin, 1927. Pp. 133. 5*s*.

The present volume, comprising the Upton Lectures which Professor Radhakrishnan delivered at Manchester College, Oxford in 1926, is an attempt to depict 'the central principles of the Hindu view of life.' The author has attempted an exceedingly difficult task, for there is no one view of life which characterizes the adherents of any religion, and a presentation of this type inevitably reflects an author's own interpretation. Historically speaking, every religion claims peoples of differing temperaments, and differing views of the world and of life. Nevertheless it is true that in that historical development distinctive principles are traceable. The case of Hinduism is more difficult than Christianity, for example, for in the latter there is a historical personality around whom and whose teaching the doctrine and the society of the religion has developed, whereas there is no one founder of the Hindu faith. In the present volume we may say that the author is interested in Hinduism as a religion rather than philosophical Hinduism concerning which he has written so lucidly elsewhere. The compass of the book is very limited, so that he has given us only a bird's-eye view, but in his forthcoming volume, the text of the Haskell Lectures delivered at the University of Chicago, he promises us a more complete statement of the Hindu philosophy of religion, for which we shall look forward eagerly.

Much of the matter of the present volume will be familiar to students of the Hindu faith, and may even seem commonplace to Hindus themselves, but they will remember that he is speaking for a western audience which needs just this type of survey. There is such a wealth of literature in the Hindu sacred scriptures that the average non-Indian cannot see the woods for the trees. This little book will serve as an excellent perspective. It is the view of life of a cultured, broad-minded Hindu who is ready to absorb all that is good and critically reject what is unworthy, whatever be the source. The resultant is a view of life which many non-Hindus will find quite harmonizes with their own views. The basis for the view of life presented is religious experience, and he draws attention to the fact that the experiences of religious persons, whatever be their outward allegiances, have much in common. The mystics of all faiths speak very much the same language, and give utterance to many of the same beliefs about man and God. 'It matters not whether the seer who has the insight has dreamed his way to the truth in the shadow of the temple or the tabernacle,

the church or the mosque. Those who have seen the radiant vision of the divine protest against the exaggerated importance attached to outward forms. They speak a language which unites all worshippers as surely as the dogmas of the doctors divide.' The professor lays much emphasis on the comprehensive, synthetic and tolerant spirit which he finds in his own faith, and expresses his belief that the future is full of hope that such a spirit will eventually prevail in the conflict of religions. Many of us share in that hope though we have not thought of it as distinctively Hindu. It is the hope of liberally minded men and women of all religions, the faith that Peter expressed in those memorable words: 'Of a truth I perceive that God is no respecter of persons but in every nation he that feareth him and worketh righteousness is accepted of him.'

The practical side of Hinduism is expressed in the concept of *dharma*. Back of the ethics and religion, there is of course the doctrine of *karma* and *samsāra*, concerning which we publish a note in the department, What Men Think. The Hindu dharma is an insistence that man must live, not by bread only, but by the spirit, a life of increasing self-emancipation, life in which the eternal is progressively realized within the human spirit. In the development of Indian religious thought, this emphasis on the life of the spirit has always been the ideal. Sometimes it has been almost buried beneath accretions of forms and ceremonies, as in other religions. But it is the glory of India that she has never wanted for noble souls who have called her back to a consciousness of the ideal. She owes no small debt to men like Radhakrishnan who to-day are making vocal that ideal and re-interpreting it in the thought and language of our modern age. *The Hindu View of Life* is a delight to read, and ought to carry inspiration to many Indians, and enlightenment to many others inasmuch as the soul of a people is so ideally portrayed.

The Religion of Zarathustra. By I. J. S. Taraporewala, B.A., PH. D. Adyar: Theosophical Publishing House, 1926. Pp. 180. Prices: Rs 1-12, Rs 2 and Rs 2-8.

This little monograph is an interpretation of Zoroastrianism for non-Zoroastrians by an adherent of that religion. It possesses the advantage that accrues to an exposition of a religion from within. As we might expect, since the author is a gentleman of culture and education, there is a tendency to spiritualize many of the rites and beliefs that less cultured Zoroastrians would treat more literally. That is a perfectly legitimate undertaking, for the refining influences of any educated community always reflect themselves on religion. At the same time, it is frequently hazardous to a historical understanding of the rites and beliefs concerned. While acknowledging the value of Dr. Taraporewala's treatment of his own faith, it is only fair to say that it shows little appreciation of the historical method. The Golden Age is almost always in the past, and the author's interpretation of the time of the Prophet with its spiritual power and vision indicates his view to be no exception.

The central concept of the Zoroastrian faith is *asha*, the Avestan equivalent of the Vedic *ṛita*. In the same way that Varuna in Vedic times was regarded as the

lord of the *ṛita*, the guardian of cosmic, ritual and moral order, so Ahura Mazda in Avestan thought is guardian of the *asha*. The idea goes back to Indo-European times, when it carried the meaning of order, doubtless as a result of the observations of the uniformity of nature processes. Both among the Iranians and the Indians there was a tendency to extend the concept so as to include moral order and the order of the ritual, as well as cosmic order. Our author associates with this ethical interpretation in Iran the name of Zarathustra. There can be no doubt of the reforming influence of the prophet in doctrine and practice, but definite information about the details is much more meagre than some suppose. We are inclined to think that our author has exaggerated a bit the ethical element in *asha* and glossed over the ritualistic and cosmic meanings. The fulness of rich spiritual content which he finds is hardly present in Zoroaster's own reflections or time. It is difficult to accept his theory that there has been a progressive degeneration from the original meaning, and that we must go back step by step, the spiritual import becoming clearer as we recede from the present. The *asha* of Taraporewala is a much more highly philosophic concept than we discover in the Avesta itself. There is no reason why that should not be so, unless it be a desire to idealize the prophet of the past.

The idealizing tendency of the author is also evident in his attempt to explain away the dualism which is traditionally associated with his faith. There is much to support his view in criticism of the popular notion. Although Mazdaeism originally portrayed a mortal combat between the two spirits, Ormazd, the spirit of Light, and Ahriman, the spirit of Darkness, this dualism is not final or ultimate. In the teaching of the prophet evil or darkness is eventually overcome, and Ormazd (or Ahura Mazda) emerges triumphant from the struggle. Thus the earlier dualism is superceded, and the monistically minded Zoroastrian can find much in the scriptures to support his philosophy.

The book contains accounts of the principal archangels and immortal powers, and also descriptions of the chief rituals and ceremonials of the Parsis. The descriptions are inclined to be theosophic, thus showing how it is possible to retain ceremonials of the past by symbolical interpretations, giving them spiritual import. The value of the work is on the side of appreciation rather than criticism.

The Bhagavad-Gita. With the text in Devanagari and an English translation by Annie Besant. Madras: G. A. Natesan & Co., sixth edition, 1926. Pp. 264. As. 4.

The popularity of this cheap edition of the Gita is evidenced by the fact that the publisher has now put out over 100,000 copies. It is also a testimony to the regard in which this great Scripture is held. Mrs. Besant's translation is intended to preserve the spirit of the original as far as possible. While it is nothing like as good a translation as that of Barnett, still in most respects it is quite accurate. There is a rather interesting point that we have observed. Mrs. Besant has translated Brahman as 'the Eternal.' This is what Professor James Moffatt did in his modern version of the Old Testament with the name Yahweh. 'The

Eternal' is without doubt a closer translation of the Hebrew *Yahweh* than of the Sanskrit *Brahman.* The motive in both cases is the same—to give an equivalent in English that would carry the meaning in a better symbol. How far they succeeded is a matter on which opinions differ.

Malayalam Self-taught. By Don M. de Zilva Wickremansinghe, Hon. M.A. (Oxon) and T. N. Menon, B.A. DIP. EC. (Madras). London: E. Marlborough and Co., Ltd., Price: 4*s.* net cloth and 3*s.* wrapper.

Marlborough's self-taught series have supplied a long-felt want to travellers and business men in different countries, of an easy guide to various languages spoken in different parts of the world. But no country offers to the foreigner such linguistic difficulties as India, where the alien immigrant is hopelessly at sea in the maze of multitudinous spoken languages. Malayalam is one such language spoken in the British District of Malabar and the Native States of Cochin and Travancore. It is unique in its alphabet and spoken sounds; and is the most difficult to study, as it contains fifty-two letters and nearly 576 syllabic characters. A guide to this language is a great help, particularly to people engaged in evangelistic and commercial activities in the country. This manual contains an exhaustive treatment of the subject of pronunciation, and the transliteration of a number of Malayalam words frequently in use. It includes further, a chapter on elementary grammar, and a multifarious variety of words and phrases used in daily conversation and for purposes of business. On the whole, it is a highly useful and practical guide for all those who are not natives of the country but have something or other to do with it.

Students' Section

The Weaver

In the diamond still of nights
Sits a weaver weaving lonely,
Weaving threads of silver lights
O'er the trancéd earth, and only
Ceasing when the Dawn alights
And flaps her grey wings o'er the seas,
And fans the flame of Mōhār trees.

His shuttles are the stars that flare
And flash across the boundless space
Which hid behind the sapphire layer
Of skies he flings with rythmic pace,
And weaves that magic mantle rare,
That softly wraps the sleeping earth,
With phantom dreams and silver mirth.

Ay—a greater Weaver is
Hid behind the things that seem.
Weaving these grand tapestries
After some immortal dream:
Fair lands waved with corn and trees;
Green shores washed by waters blue;
Clouds of wondrous shape and hue;

The rainbow on the cloudy sky;
The beam-webbed milky way
Afloat upon the space on high,
All wet with starry spray;
And morn and noon and twilight sky;
Each leaf and bloom and wing,
Each great and little thing.

Earth is as a sparkle tiny,
On His star-bespotted robe,
One in countless sparks more shiny.
That upon His garment throb
Like a sun-gilt water briny,
Where each shifting emerald wave,
Holds a sun within its cave——.

Veiled behind the endless changes,
Weaver of Eternity!
Hid beyond the cosmic ranges
Of the mind! we bow to Thee.
Though this mortal flesh estranges,
We who are Thy part,
From these that are Thine art.

We feel Thy breath pulsate the veil;
We feel Thy heart-blood throb;
We see Thy glorious art prevail
In leaf and wave and orb.
O, show us how to cross the pale
Of time and hear Thy shuttles roar
In rhythmic accents ever more.

T. BHASKARAN,
IV. Hons. Litt.

The Solitary Reaper.

'Wherever we meet with the successful balance, in Wordsworth, of profound truth of subject with profound truth of execution, he is unique. His best poems are those which most perfectly exhibit this balance. . . . If I had to pick out poems of a kind most perfectly to show Wordsworth's unique power, I should rather choose poems such as "Michael," "The Fountain", "The Highland Reaper".

—MATTHEW ARNOLD : *Essays in Criticism.*

'The test of the highest poetry is that it eludes all tests . . . . There must be something in the mere progress and resonance of the words, some secret in the very motion and cadence of the lines, inexplicable by the most sympathetic acuteness of criticism. . . . Witness the first casual instance that may be chosen from the wide high range of wordsworth's.

Will no one tell me what she sings?
Perhaps the plaintive numbers flow
For old, unhappy, far-off things,
And battles long ago.

. . . . In the whole expanse of poetry there can hardly be two verses (the two last lines) of more perfect and profound and exalted beauty.'

—ALGERNON CHARLES SWINBURNE: *Miscellanies.*

William Wordsworth the literary artist, had two chief moods, the majestic and the musical. When the former mood was upon him, he wrote such poems as 'Laodamia,' 'Dion,' and the 'Ode to Duty.' And when the latter was upon him, he produced such gems of song as 'The Fountain,' 'The Daffodils,' and 'The Solitary Reaper.'

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THE CAST OF THE TELUGU DRAMA

The chief thing that strikes me in 'The Solitary Reaper' is its exquisite melody. One can safely assert with Hudson that no other poem of Wordsworth excels this in what he calls 'verbal magic.' Secondly, I love the poem for the onomatopoeic effects that it contains. The chief of such effects is that pervading the whole piece—tranquillity. Every time I finish reading the poem, a sense of quiet steals into my heart, and the cares and burdens that this vale of tears sometimes imposes on man are lifted off my soul and, I am enabled to take part in, what Mr. Chesterton calls, 'the applauding chorus of the cosmos.' In this connection, it is well to recall these unforgettable lines of Matthew Arnold :

'Time may restore us in his course
Goethe's sage mind and Byron's force :
But where will Europe's latter hour
Again find Wordsworth's healing power.'

A third point of appreciation is the wealth of imagery enshrined in the poem. The very picture of the solitary reaper 'flashes upon that inward eye which is the bliss of solitude.' Last but not least, there is a certain indefinable quality about the poem which any student of poetry cannot but admire. There is an inimitable charm in it. I cannot define it. I can but describe it. I can best do so by calling it 'elusory.' There is something elusive about the poem. Every time one reads it, it escapes one. That is the sign-manual of a great poem. It should escape and bear reading over and over again.

All these points can be illustrated best by a detailed examination of the piece under consideration.

It opens with the delightful picture of a Highland girl reaping in a field of corn all alone. A clear blue sky is visible over her head and over the low Highland hills around the field. We see her bending over the sickle with the sleeves of her jacket tucked up above her elbows. Some sort of a kerchief tied round her head prevents the dust from settling on her locks. We see her

'Stop here, or gently pass !'

The expressive effect of the trimeter here is remarkable. The line itself, as it were, halts at the comma, and then proceeds slowly. While thus she cuts and binds the sheaves of grain, she sings a mournful sounding song. And the poet cries :

'Oh listen ! for the vale profound
Is overflowing with the sound.'

The idea of the song permeating the vale is very appositely conveyed by the liquid 'l' occurring thrice in the two lines and, by 'profound' rhyming with 'sound.'

The second stanza must be quoted in full. In it the poet speaks of the effect the song had on him. No two quatrains in the whole range of English poetry (so far as I have read, of course) have ever thrilled my musical ear so much as these. They also contain two beautiful images which are not only aptly chosen but also true to nature.

'No nightingale did ever chant
More welcome notes to weary bands
Of travellers in some shady haunt,
Among Arabian sands:
A voice so thrilling ne'er was heard
In spring-time from the cuckoo-bird
Breaking the silence of the seas
Among the farthest Hebrides.'

Can any imaginative touch transcend this? When I read the first quatrain, I hear the nightingale singing her notes of 'tumultuous harmony,' 'as if the god of wine had helped her to a valentine.' And, as her song falls on the welcome ears of the travellers in the peaceful grove, I see their countenances brighten up with joy and their spirits are lulled to rest by the celestial harmony, after their recent tiresome journey on the burning sands outside. And, when I read the second quatrain, I hear the cooing of the 'darling of the spring.' And I see in my mind's eye the still waters of the seas gently kissing the shores of the far off isles as they sleep around them. And then I hear the voice of the 'blithe new-comer' thrilling this silent region into a resounding echo. The last two lines of the stanza are worth attention. 'The silence of the seas' is very subtly imbedded in the phrase 'the farthest Hebrides.' The distance of the islands is much more subtly conveyed by the long vowels 'a' in 'farthest,' and 'e' in the last syllable of 'Hebrides.'

His inability to catch the subject-matter of her song stimulates the poet so agreeably that he quaintly cries, 'Will no one tell me what she sings?' For, he does not know the Gaelic language in which she sings. Perhaps, he thinks, her song is,

'For old, unhappy, far-off things,
And battles long ago.'

In these lines of mostly simple words, the magic wand of the poet rouses the spirit of the dead past into activity, and the ringing echo of the second line most aptly represents the din of battle rolling away like rumbling peals of thunder into the misty distance of 'long ago.' In their harmonious combination of grandeur of thought and simplicity of diction, these two lines may well be said to be worthy of having been written by such great poets as Homer or Milton themselves.

The poet then suggests to himself, as an alternative, that the matter of the song may not be so elevated as all that. It may be a humble poem dealing with something of every day occurrence, and, with some elemental emotion, 'that has been, and may be again,' and which is common to all mankind.

This thought is of great interest to the reader of Wordsworth. This may be taken as the text of almost all his poems. In his own words,

'The moving accident is not my trade,
To freeze the blood I have no ready arts;
'Tis my delight, alone in summer shade,
To pipe a simple song for thinking hearts.'

Now, this is the very quintessence of all romantic art. The classical doctrine is that the greatness or beauty of a poem should be in the theme itself. But the romantic dogma asserts, and rightly, that a poet can choose any subject. Only he should pass it through the crucible of his imagination and thereby transform and transfigure it so as to render it fresh, and in a way, his own. The appeal of classical art is in the main intellectual; that of romantic art, emotional. Thus to Wordsworth the romantic, the poetic worth is not in the subject itself but in the poetic imagination. It is the imaginative sensibility that counts. To a Peter Bell,

> ' A primrose by the river's brim
> A yellow primrose is to him,
> And it is nothing more.'

But to Wordsworth,

> ' The meanest flower that blows can give
> Thoughts that do often lie too deep for tears.'

The poem under discussion is an excellent illustration of the romantic doctrine in question. The subject-matter is a perfectly commonplace one and, if you please, of a humble kind. But Wordsworth so assimilates it to his poetic experience through his emotional consciousness that it springs out of him fresh, the gem of song that it is, like Pallas Athene coming full-formed out of the head of Zeus. It is not every poet that can thus make a humble subject yield poetic pleasure. The importance of this fact can be realized if we remember that even Wordsworth did not always succeed in doing so as, for example, in such few but flagrant failures as 'Goody Blake' and 'The Thorn'.

Whatever the theme of the song was, the lass went on singing at her work. He listened breathless and motionless, for, the innermost fibres of his being were responding to the varied intonations of her voice, like the chords of some musical instrument. And she sang with such a tone that, as he mounted up the hill, he almost received her heart into his own.

When all is said and done 'The Solitary Reaper' speaks for itself. It is there for all time. It is one of the smallest but the most scintillating gem in the crown of Wordsworth's poetic glory. One can say of the poem what the poet says of the song of his 'Reaper':—

> 'The music in my heart I bore,
> Long after it was heard no more.

P. T. Srinivasan,
IV. Hons. Litt.

THE ARABIC SEA

A Soliloquy on the West Coast

The crimson rays of the setting sun
 Fall on the silver sea,
While the moon is setting in the West
 In all her majesty.

Cool is the breeze, and calm is the sea
With its swelling waves in foam,
While I, with my thoughts, in solitude,
On the moonlit sea-shore, roam.

Rolling along in thundrous roar
Come the waves of the Arabic Sea,
While the fish of the main frolic in glee
'Neath the billows of the sea.

Surging and seething are the waves of the sea.
The waves of the Arabic Sea,
Glitt'ring like silver in the light of the moon,
Dark and deep tho' it be.

These waters have rolled from ages of old,
Swelling in foam and in mirth
For eons they roll, and continue to roll
Till the day of the death of the earth.

O mighty main, whose waters deep
Rest unbounded still!
A slave is man to thy furious waves
Conquer thee, he never will!

B. Kalyanasundaram,
IV. Hons. Hist.

College Notes

Prof. Radhakrishnan

PROFESSOR S. RADHAKRISHNAN WHOSE PHOTOGRAPH WE PUBLISH elsewhere in this number graduated from this College in the year 1907 and took the M. A. degree in 1909. Mr. Radhakrishnan who is now King George V. Professor of Philosophy in the Calcutta University is the author of several works on Indian Philosophy and is regarded as one of the chief exponents of that subject by Western scholars. During his recent tour in Europe and America he expounded the Hindu view of life to interested audiences. The honour of addressing the first convocation of the Andhra University which was held in December was assigned to Mr. Radhakrishnan. His chief works include *The Reign of Religion in Contemporary Philosophy*, *Indian Philosophy* in two volumes, and *The Hindu View of Life*, the second volume of his *Indian Philosophy* and the *Hindu View of Life* being reviewed in the present issue.

Debating Society

THE DEBATING SOCIETY TRIED TO DO SOME WORK during the second term. Its first meeting was held on the 14th October with Mr. Boyd in the chair. Mr. A. Krishnamoorthi, one of the Joint Secretaries of the Society opened a debate on the question whether propaganda in foreign countries will accelerate self-government for India. Mr. T. R. Venkatachari, Mr. Shaik Abdulla, Mr. M. Rama Rao and Mr. Gangadhara Rao took part in the debate. The members decided against propaganda in foreign countries. The next meeting of the Society held on 25th November considered the question of Hindu-Muslim Unity in relation to Indian self-government. Mr. Bingle presided. Mr. V. Srinivasan pointed out that unity was the need of the hour. If Hindus and Muhammadans continued to fight among themselves the chances of Indian self-government would grow more and more remote. Mr. Venkatasubramanian opposed the motion and observed that social differences among the different races constituting a nation need not necessarily retard the political progress of the country. Messrs. T. R. Venkatachari, Alexander and Chandrasekaran opined that Hindu-Muslim Unity was indispensable before India could have any measure of self-government. Mr. Shaik Abdulla maintained that the Hindu-Muslim differences were being exaggerated and exploited by interested persons. The members finally resolved that Hindu-Muslim Unity was not essential for the political advancement of India. The last meeting of the Society considered the question of India's fitness for self-rule. Mr. Shaik Abdulla, the mover of the resolution, claimed it as India's right. Several speakers followed and supported the proposition. Dr. Meston who presided reminded the members that the real question was not whether India was fit or unfit for self-government but whether India was fit to retain it once she got it.

Philosophy Association

THE PHILOSOPHY ASSOCIATION DID SOME USEFUL WORK during the last term. Mr. Balakrishnan of the fourth class read a paper on 'Knowledge is entirely impossible.' Mr. Balakrishnan said that 'absolute knowledge is impossible, but knowledge is possible to a limited extent.' This was followed by a keen debate. Dr. Cornelius who presided remarked that the various speakers assumed that knowledge was possible and that no one seemed seriously to doubt the validity of knowledge. He said that those who held that knowledge was impossible had a strong point in their favour since they obtained knowledge through the sense perceptions and senses often misled them. At the second meeting of the Association on the 13th of October Miss Sarber of the Women's Christian College gave an interesting lecture on the philosophy of Hume which is published elsewhere as an article. The third meeting of the Association was held on 20th October when Mr. Adiseshiah of third honours class opened a debate on 'Is there an external world?' Mr. S. J. Theodore presided. The speaker began the debate by explaining the telephone exchange view of the external world as given by Mr. Fullerton. He denied the existence of an external world. Mr. Balakrishnan explained the 'spiritualistic idealism' theory of Berkeley and connected his thought with the subject of the evening. Mr. Venkatachallam advocated the philosophic theory of Bosanquet and claimed that there is an objective world. After much lively discussion, the meeting terminated without reaching any conclusion regarding the existence of an external world.

Caithness Hall.

THE MEMBERS OF CAITHNESS HALL CELEBRATED DEEPAVALI on Monday, 24th October. In the morning a portrait of Dr. Rabindranath Tagore was unveiled by Sir A. P. Patro, who in a short speech pointed out the high ideals which the great Indian poet set before the people of India. In the evening Mr. Matthews presided over the general meeting which was held in the library hall. There was a large gathering of guests and after tea, the proceedings commenced with prayer. Mr. K. M. Srikantha Reddy, secretary of the hostel, read a report of the activities of the hostel during the preceding year and thanked the old members and guests for responding to his invitation in large numbers. Mr. Manickavelu Nayager, M.L.C. in behalf of the old members expressed his gratefulness to the Secretary and other members of the hostel for their kindness in inviting them. Mr. Nayager gave his own reminiscences of his life in Caithness Hall and said that he chiefly valued it for the intimate friendships formed during his five years' stay in the hostel and for the training in self-help and self-reliance. The members enacted a Tamil farce and an English farce. Prizes were distributed by Mrs. Meston. The function terminated at 8 p.m. with a few concluding remarks from the chair.

Andhra Dramatic Society

THE MEMBERS OF THE DRAMATIC SECTION of the Andhra Bhashabhi Ranjani Sangham enacted in the College Hall before an appreciative audience 'Varavikrayamu' on Saturday 3rd December. Briefly the story is as follows. Purushothama Rao sold his estate and arranged to pay a large dowry for the marriage of his daughter, Kalindi; but she

as a protest against this degrading social custom committed suicide. Purushothama Rao arranged for the marriage of his second daughter, Kamala, with the same bridegroom for the same dowry but after the celebration of the marriage Kamala declined to go to the husband's home as a protest against the payment of dowry. The father of the bridegroom set the law in motion against Purushothama Rao for the recovery of his daughter-in-law and her jewels. In the course of the hearing of the case Kamala was able to prove that the husband had been sold to her for a sum which is represented by the dowry and that the bridegroom should go to her home and live with her. The case was finally compounded and the suit was withdrawn.

The actors did their several parts exceedingly well and Mr. Narasinga Rao, Stage Manager, deserves to be congratulated on the great success of the drama. *A photograph of the actors is published in this number. The following is the* cast of several characters in the play :

Purushothama Rao	...	..	Mr. M. Somasundara Rao, IV Class
Lingaraju	...	...	,, N. P. Sankaram, I Class
Basavaraju	...	...	,, P. Venkateswara Rao, II Class
Perayya	...	...	,, V. Venkatachalam, III Class
Veerayya	...	...	,, E. G. Krishnamoorthi, I Class
Gantayya	...	...	,, P. Nagabhushana Rao, III Class
District Judge	...	...	,, E. G. Krishnamoorthi, I Class
Vakil Vengalappa	...	...	,, P. Nagabhushana Rao, III Class
Schoolmaster	...	...	,, V. Venkatachalam, III Class
Bhramaramba	...	...	,, D. Govindarajulu, IV Class
Subhadra	...	...	,, J. Krishnachar, III Class
Kalindi	..	...	,, K. Gangadara Rao, III Class
Kamala	...	...	,, K. Dakshinamoorthi, I Class

Farewell Function.

READERS ARE AWARE THAT DR. S. G. M. RAMANUJAM who returned from England in September after taking his Ph. D. Degree and who till recently was a member of our staff has been appointed as Professor of Zoology in the Presidency College. To bid him farewell the Lecturers' Association gave a tea party on Tuesday 13th December. Dr. Moses who also returned from England after taking the Ph. D. degree and who is now professor of Physics in this institution was also invited to tea. Mr. Sabhesan, Secretary to the Association, congratulated Dr. Ramanujam on his appointment as Professor of Zoology in the Presidency College. Mr. Sabhesan said that he and his colleagues always held Dr. Ramanujam in high esteem not merely for his scholarship but for his great qualities of heart. Dr. Meston expressed his great pleasure in meeting Dr. Ramanujam and hoped that Dr. Ramanujam would continue to take an interest in his *alma mater* and in the cause of aided education. Dr. Meston had reasons to think that Professor MacBride under whom Dr. Ramanujam worked in London entertained a high opinion about his research work. Dr. Ramanujam and Dr. Moses thanked the Association for their hospitality and for the kind words spoken about them.

Malayalee Association

THE INAUGURAL ADDRESS OF THE MALAYALEE ASSOCIATION was delivered by Sir C. Sankaran Nair on Wednesday 12th October in the Second Class Room. There was a good attendance of Malayalee Students of the College and Mr. O. F. E. Zacharias welcomed Sir C. Sankaran Nair in a short speech and thanked him for his kindness in agreeing to deliver the inaugural address of their Association. Sir Sankaran Nair who spoke in Malayalam said that it gave him great pleasure to be present there that afternoon and meet many young Malayalees. He was glad to think that the number of Malayalees in the City of Madras was increasing from year to year. He asked the members to cultivate spirit of brotherliness among themselves. He recounted briefly the history of Malabar and pointed out how unlike people in other districts the Nairs, Muhammadans and Christians of Malabar belonged mostly to well-known and aristocratic families. Sir Sankaran Nair remarked that they should think and act together in all political and social affairs. Strange people were going about Malabar preaching the gospel of non-co-operation and non-violence; but he for one would have nothing to do with the gospel nor with the preachers. He advised young men to give a wide berth to these new prophets and apply themselves diligently to their studies and go ahead in life. He had made some enquiries of the worth and work of Malayalee young men employed in Government Service in different parts of India and he had received uniformally good reports about them from the Provincial Secretariats from the great public departments of the Government of India. He emphasized the supreme value of developing character which was the greatest passport to success in life. With a vote of thanks proposed by Mr. Chandran, the meeting dispersed.

Pachaiyappa's College

THE NEWS OF THE APPOINTMENT OF MR. K. CHINNATHAMBI PILLAI to succeed Mr. M. Ratnaswamy as Principal of the Pachaiyappa's College will be welcomed by the old boys of that College and by educationists throughout the Presidency. Mr. Chinnathambi has acted as Principal of the Pachaiyappa's College on several occasions and his confirmation in the permanent vacancy is a recognition of his worth as an administrator in the field of education. Mr. Chinnathambi graduated from this institution in 1889 and joined the service of the College as lecturer in mathematics and rose to the position of Assistant Professor. He retired in 1915 after completing nearly twenty years of service, and at the request of the trustees of the Pachaiyappa's College, accepted the position of professor of mathematics in that institution. During the years of his service in this College Mr. Chinnathambi had a great reputation for his clear grasp and exposition of an admittedly abstruse branch of knowledge, and we still seem to hear his voice in the class rooms reverberating through the corridors of the College. Mr. Chinnathambi, after he joined the staff of the Pachaiyappa's College, continued to devote himself to the interests of that College with undiminished zeal and enthusiasm and we are greatly pleased that he has now reached a position which was till now reserved for persons qualified in British Universities. We wish to convey our congratulations to Mr. Chinnathambi Pillai.

SIR R. VENKATARATNAM NAIDU, KT., M.A., D.LITT.
Vice-Chancellor, University of Madras

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The Psychology of Symbolism

'WHEN ancient man connected trees and stones, horns and pillars and mountains, rivers, lakes and heavenly bodies, one with another, he did so because to him all were parts of a perfect whole.' In these words Dr. Mackenzie expresses the attitude of primitive man to life, and the universe in which he finds himself. The sentence quoted is from his book on 'The Migration of Symbols' in which he considers the main types of symbols in use in the various religions, civilized and primitive.

Now symbols do not by any means form a peculiar feature of primitive thought. As a matter of fact, it is as man rises in the scale of culture that symbolism becomes developed, refined and most suggestive. Deep down in man's mind lies still that consciousness of the oneness of the universe, that feeling of unity of all things in the midst of apparent diversities. And symbolism expresses this feeling; it is a manifestation of what is man's real views about the universe, about the creatures in the universe and about himself.

Let us at the outset consider the meaning and purpose of a symbol. The word 'symbol' is defined as 'a visible sign or representation of an idea, anything that suggests an idea or quality or another thing as by resemblance or by convention.' The purpose of illustration in ordinary conversation is obviously to make clear what we mean. An idea, if obscure, cannot be easily grasped unless with extra help. If it is too profound, none but the scholar can understand its import. The progress of all knowledge is marked by the degree to which it can be apprehended by the average man. But the average man can be instructed only with the aid of mechanical devices like signs and symbols. Just as the picture in our elementary books is the key to the story, so at a later age the figure of speech (how suggestive a term!) enables the reader to grasp the real effect underlying the words of the author which otherwise would have puzzled him. In our intercourse with our fellow-men, signs and symbols have to be brought into play to economize labour, time and money. Fancy the sailor instead of signalling to the port officer furlongs away, going up leisurely to him and giving information about a ship; or our sending written letters to our friends

miles away about urgent affairs instead of calling into service the telegraph which uses codes and signs. The 'shorthand' device is an indispensible one in modern civilization which depends so much on the 'power of the spoken word.'

It is evident then that signs and symbols are necessary for the mutual benefit of one and all. But it may be doubted whether symbols which play so large a part in language are at all necessary in religion. The question does not arise when we bear in mind that religion is not something that is *sui generis* or inexplicable, but belongs to the sphere of man's normal activities. It is as a response to the religious needs of the people that religion functions. Religion is not a non-psychological phenomenon, but may be understood best as a phase of mental life. As mental life is the field of psychology it is not strange that religion should be analyzed psychologically. In fact, it is the psychology of religion that is replacing the crude, untested and fancy-mongering religion of an earlier day. Religion is but an expression of a phase of man's personality, and therefore in religion we are still in the realm of meaning import, criticism, in short, all the higher mental processes.

Of these processes, it needs no very profound scholar to point out, symbolism is a feature. So long as language is the basis of human intercourse (and that will be, so long as the human race continues to exist), so long as economy in everything is the watch-word of progress, so long shall symbols, pregnant with meaning, continue to function.

The ordinary logical concept is a symbol with reference to a judgement. It is a short-hand expression standing for a series of judgements. When we are using the concept, we implicitly mention the various judgements which have contributed towards it. We cannot in the nature of the case keep on detailing all the various judgements every time we want to speak of a thing. Progress in knowledge consists in having recourse to short-cuts in expression. It is an index to the stage of culture reached by a race when their language is rich in expressions.

The title of a book often and should always suggest the nature of the subject-matter contained in it. A logician like Croce would say that 'Knowledge is concept' i.e., the whole of knowledge can be summed up in one 'concrete, vivid, universal and unique' expression. A book, therefore, expresses one unique idea, and its title is the symbol of the book.

Even the conventional signs we use in our daily intercourse with other persons, are just so many symbols conveying meaning. In speaking we make gestures to express our meaning more clearly. In writing, we use the marks of punctuation which are a time-saving, labour minimizing device. The child's life would not be half worth living were it not for the signs which it makes and which people understand.

It is thus evident that life teems with symbolism and that symbols are constantly in use, as survivals, as suggestions about various things, as conventional devices and as attempts at economizing. The symbol is an epitome of the knowledge of man pertaining to one specific topic, and when the symbol is

examined the skilful and discerning observer can draw out of it all that it stands for.

The picture by the artist and the statue by the sculptor are also symbols, for they suggest the working of their minds. The artist who can paint an exquisite picture of 'Faith' or 'Devotion' is creating a symbol for the layman who can but vaguely catch the spirit of these abstract qualities. The sculptor who can fashion a monumental statue of 'Liberty' is suggesting to his less gifted mate what is to the latter merely a set of privileges and laws. The greater the artist, the more the suggestiveness of his work. The poet's function is the same. In his lines we catch a glimpse of reality as we would like to see it. He etches with his words a symbol of what is unfamiliar to us. His is an attempt to grasp the nature of the real and imprison it in words for the benefit of his fellows; and though his words 'may half reveal and half conceal the soul within,' yet we must be thankful for at least the one-half we have secured.

But neither the artist nor the poet have created the symbols 'out of their own minds.' They had caught the idea somewhere. Their superiority to other people lies in this that they have seen further, and more clearly than others. There is nothing in a poem like 'We are Seven' which might not have been conceived by a lesser poet than Wordsworth. But the real spirit of the poem, the subtlety of the conception and the simple grandeur of the theme are Wordsworth's own. Nature suggests, the artist understands and takes the hint. Nature reveals a phenomenon, the artist understands the revelation. All the difference that exists between the stage of the animal for which mere succession is the rule, and the average man for whom co-existence, interpretation of sense-data, etc. are real facts, exists between the average man and the poet or artist.

To the religious man too, nature has its revelation, just as it has for the poet. All his ideas of religious worship, the ways and means of worship the accessories of religious worship are all gained through inspiration from nature; placed as he is in an environment which has inexhaustible resources of suggestivity, it is natural that he should take advantage of his opportunities of observing nature and using them for his own purposes. It will be seen that most symbols are imitations of objects of nature, and that the others are suggested by natural phenomena and human reactions towards them.

Thus the parent-source of symbols is nature. Nature is our educator, assuming for the present that nature and we are distinct. Most of our daily actions are based on phenomena of nature, our movements are controlled by phenomena of nature; our concerns are with the phenomena of nature. Modern civilization advances on the basis of our adaptation to our environment. It is not a matter of surprise therefore that man's symbols should be suggested by and suggestive of nature and its phenomena. For it is through nature that we get at the 'unseen.' We believe that nature as we see it to-day is but a part of what is yet to be seen. Nature is revealing itself to us gradually. There is sure to lie behind this visible presence, a yet more glorious phenomenon. And the visible is a key to the invisible. To understand the invisible we must first understand the visible.

For, so long as we believe in the possibility of evolution as a continuous process yet allowing the 'emergence' of real differences, we must hold to the view that reality can be grasped only by our understanding the revelation given us by nature.

Man's life consists in his responses to his human and non-human environment. Life is mainly a life of responding to the influences of the people and things about us. There is no man who is not social. Even the anchorite who 'leaves the world' is a social being making social responses towards the environment of the forest. Therefore we may say that man is intimately related to the universe of which he is a member. His actions, his interests, his thoughts all keep him within the circle of the universe. Every event, natural or human affects him. He cannot get on without nature and the rest of humanity. This shows him how organic a part of the universe he is. Thunder and sunshine, mountain and river, moon and stars, trees and plants, animals and men, these are equally his concern. To get on in life means the smooth course of all these things. It is more easy to move along with nature then to try and oppose it; 'at peace with the elements' for self-preservation is his motto.

Most symbols express the social character of man. From the very fact that man uses symbols of the phenomena of nature, symbols of the activities of other organisms, like animals, reptiles and birds, it will be seen that man wants to testify to his intimate connection with the other members of universe. It sometimes strikes me as though primitive man had some vague theory of his evolution from lower organisms and that he idolized stones, reptiles and animals as a mark of gratitude for their having been instrumental in his own making. However that might be, man is decidedly a social animal and he symbolizes this feature of his life.

Sometimes it is a common experience to hear the expression 'that gesture was far more eloquent than words'; or that 'words fail to describe such and such a thing.' A symbol's function is often to express more than can be attempted in language. There are things which cannot be related at all except through symbolic representation. Why is it that we often hear of a play that was unsuccessful owing to the poor acting of the players? The words are the same, and perhaps the gestures may be intelligible enough. And yet it requires the master-actor to give the true interpretation to the drama.

And then there is the 'crowd' which cannot hope to understand things unseen, which cannot rise above itself to imagine without extra aid, the higher conceptions which the leaders in thought create. A conception of God as spirit fails to stir the hearts of the illiterate to devotion. But the image with twelve hands, six faces, mounted on a peacock, with two consorts on either side—this representation of Deity readily appeals and evokes the most sacred devotion. Symbolism is, in the main, a response to a felt need, and adaptation to the human, illiterate environment on the part of intelligent man.

Having thus considered the nature of the symbol itself, it may be interesting to dwell for sometime on its origin. Pratt writes 'Before an object or an action

can become a religious symbol it must have become so intimately associated with the religious object as to be itself permeated in the mind of the worshipper with the sacred feeling, the faith, the volitional attitude which *is* his religion.' Generalizing very broadly, we may say that religion is associated *primarily* with hero-worship. Of course it may be objected that by religion is here meant the religion of the worshippers of Grama Devatas. But it is from Grama Devatas that the idea of one god evolved. The god of civilized and discerning consciousness is but the Grama Devata changed beyond recognition by an idealizing process. However, the hero cult leads to the village god worship and in many cases village gods were originally real heroes. The things which they used acquired special virtue. Not only they, but other things like them also become filled with peculiar significance. The accounts we hear of some of the magical swords used by legendary figures like King Arthur, are illustrative of this feature. Later on, when the hero's achievements are either a vague memory or are forgotten, the objects alone function and become religious objects. A substitute stimulus has evoked the original response according to the well-known principle of psychology.

Let us consider another phase of the matter. Man is a creature with the instinct of curiosity. He observes things not only because he is interested in them as affecting him personally, but he just observes them because he wants to *know* what they are. The movements of the reptiles attracted his attention. The way in which the serpent wriggles towards and into its hole left a firm impression on man's mind. The action of the snail as it crept to safety into its shell was a wonder to him. The shape of certain creatures had a fascination for him. In short, most of the unusual things in nature, which always attract attention, were objects of interest to man. The original stimuli were replaced by substitutes and they, the latter, evoked the original responses. Certain movements of his fellow-beings also had more than a passing interest for him. The dance, for example, which is a manifestation of love, friendship and joy, became a symbol with other bearings than the original ones. The 'blood-relatedness' of people which makes for kindred and family love is represented later by an actual mixing of the blood of two different persons. The community dinner of the tribe is replaced by the common dinner of different persons to symbolize unity. Instances of this kind may be multiplied but they illustrate the fundamental principle of substitute stimulus and response. When two things a man and a weapon are associated originally, and the response made to the stimulus man, later on the weapon becomes the stimulus while the response is the same.

Other principles involved are those of analogy and the fallacy of *post hoc ergo propter hoc*. That like produces like is a very common belief. If on a former occasion a certain object was connected with a successful event, that object becomes a symbol of success. The other principle holds good also in the same way. The dance of savage tribes, the ploughing and sowing ceremony performed by certain South Indian tribes come under these categories. Rain-making ceremonies often rest on this principle. The man who gets up into a tree, pours water on the ground, strikes a match and beats a drum, believes that this will bring rain very soon.

It may be helpful for us to notice at this stage the relation between symbols and myths. A symbol is a visible sign or representation of an idea; and a myth is the embodiment of a 'belief regarding some fact or phenomenon of experience, in which often the forces of nature and of the soul are personified.' It is evident that the symbol and myth are almost of a piece, the former being a device to put in a picturesque and striking manner what cannot otherwise be expressed, and the myth being the explanation of a phenomenon on popular lines. Dr. Kellett in his story of the myths has suggested the following psychological elements as promoting the origin of myths: (1) ignorance, (2) the desire not to confess it, (3) fear, (4) wonder, (5) analogy (like in one point or two—like in the rest), (6) association of ideas, (7) courage, (8) story-telling impulse and story-improving tendency. Let us consider whether some of these tendencies play a part in symbolism also. A symbol does not owe its origin to ignorance at all. For, it is only after understanding the full significance of an object that it is made to stand as a representative of that significance. And far from there being a desire to conceal anything, the symbol symbolizes a comparatively high degree of culture inasmuch as it not only presupposes the genius of the man who instituted it but the ability of the man to whom it is a symbol to be satisfied with it.

Fear sometimes prompts symbolism. Many objects of worship are objects of fear. Many natural phenomena came to be worshipped because of the fear they created in man's minds. Many snake symbols, and symbols of other creatures are common in South India. The various charms that are used are just symbols of the objects feared. In fact totenism which is one aspect of symbolism is also prompted by fear. To be called the descendants of a particular animal, especially when that animal is a wild one, is to create an imaginary relationship simply with a view to self-preservation. Even in the giving of names, the fear instinct is at work. Uncouth names are often given to children to save them from evil influences like disease or death. In some cases, the real name is known only to the bearer of it and his parents, because of the belief that if a man comes to know the real name of another, he has him, the name being the man. It is noticed by Thurston that Nambudris of Malabar have two names, one secret and the other public.

It will not be denied that wonder is one of the chief items in the formation of symbols. Most of the objects of nature are wonderful to behold. The caves, the huge mountains, the movement of water on the ocean, the movement of living things, the shape of certain creatures, are all wonderful. Now what is out of the ordinary strikes us as of special importance. When we want to suggest the idea of greatness, we represent a deity as being born on a mountain, when we want to suggest the idea of change we represent that idea by means of water; when the mysterious nature of a thing is to be depicted we have recourse to the cave symbol.

The other features, analogy and association of ideas we have already in part admitted. The fertility rites that are often performed in various connections are due to the belief in the principle of analogy. Some tribes include in the marriage rites, a ceremony of fishing in a tank. The custom of using plantain-trees as door

posts and as pillars of the marriage booth rests on the idea of fertility. Rice-throwing on happy occasions is also a symbol of fertility. The device resorted to by many magicians of torturing an effigy with evil intentions on a person is a manifestation of the idea of analogy.

Courage is also an aspect of the symbolizing tendency. For the manufacture of a symbol is a venture of the imagination. Just as the myth-maker puts forth a theory, the symbol-maker creates an idea which may not be after all accepted by other members of Society.

The story-telling and improving tendency is involved in symbolism. For symbolism is imagination. The highly developed concepts of religion are full of significance and meaning. The phrase 'and thereby hangs a tale' may be applied to the symbol as very apt. Behind each symbol there are ever so many legends and myths which have been manufactured to suit the particular theory of the particular symbol.

Thus we find that the symbol and myth are dependent on more or less similar psychological tendencies. Both the religious symbol and myth merit our admiration as indicative of the soaring inspiration of man, and both are defective inasmuch as they are pure speculation. Taken by itself, the symbol or myth is perfectly consistent in itself, i.e., its origin, the purpose it serves, the meaning contained in it are quite plausible. But when cold reason is applied, a myth is seen to be a myth and a symbol as just serving a useful purpose.

The appeal of art is an appeal which it is impossible to resist. Human nature is so highly developed that it readily responds to the 'tertiary qualities' of beauty and the like. The appreciation of art, the appreciation of beauty and the appreciation of the grandeur of natural objects are peculiar to the human consciousness. What makes the appeal in a dancer is primarily the idea of grace. And with primitive tribes too, the dance is resorted to, though not mainly, owing to its asthetic appeal. It brings him joy to behold a dance. Just before going out to war, a dance puts the warriors in the proper frame of mind. The actions which are similar to those that follow victory serve the very useful purpose of auto-suggestion. The music and song accompanying the dance infuse in them courage and strength. The songs chosen are such as to stir the blood of the warriors. The rhythmical music effectually promotes, says Hirn, regular co-operation in fighting. The united efforts of the various men are due to the one purpose which they have set themselves of dancing harmoniously. A common purpose calls forth common action. Later on, in the actual presence of danger, the common purpose still holds and united action results. The same writer, Hirn, continuing says that the dance is the response to the need of stimulation especially in the presence of danger, owing to fear and owing to the necessity of slaughter. Tattooing, painting, etc. are had recourse to with a magical purpose. These give the person a new power, as it were, and he becomes exhilarated. Historic art is connected with national pride, for the sight of the heroes of old really tends to rouse people to action. The primitive warrior, during his dance makes grimaces and awkward gestures to strike terror in others. Translating these feelings into psychological terms, we come

face to face with 'empathy', the 'feeling into' a thing. The appeal of art is in the first place emotional; the actors themselves are affected: the spectators also are moved greatly. The joy of the dance makes the warriors more courageous while the onlookers cheer the fighting party. The dance is also a socializing factor. Art is social in nature. To enjoy art is to be at one with one's fellowmen. To join in a common dance is to establish friendly relations with another tribe. After concluding peace with a tribe, the two tribes dance it together as a symbol of friendship.

Sometimes a dance consists of various movements on the part of people supposed to be possessed. They imitate what is believed to be his appearance, movements and behaviour. 'With regard to some of the symbolic dances representing hunting or fishing or the movements of game-animals,' writes Yrjo Hirn, 'much may be said in favour of Mr. Farrar's view that the object of the pantomime is to make clearer to the deity a prayer regarding the things imitated.

The close connection between a dance and its magical influence must be borne in mind. Dramatic performances often form part of initiation ceremonies in primitive society. The kangaroo dance practised by the tribes of Australia is meant to impart instruction concerning the customs of the animals to the novitiates, or to confer upon them a magic power over the game. The practices followed in curing people suffering from various troubles are also magical in their significance, depending as they do on the belief in 'the efficacy of vehicles and symbolic action.' In Conjeevaram there is a temple where a narrow opening is cleared in the wall. People have to go through it as a sign of their having crossed the pass of purgatory. Mr. Hirn observes that 'the method of restoring sick people and sick cattle to health, by pulling them through a narrow opening, for instance, in a tree, which has been explained by most authors as a case of magical transference by contact—i.e. transference of the disease from the patient and of the vital power represented by the tree to him, ought, according to the brilliant hypothesis of Prof. Nyrop, to be considered a magical symbolic representation of regeneration. A common example of this kind of symbolism in India is furnished by the practice of making people under a social ban pass through seven arches or huts which are successively burnt. This is a sign of regeneration, man, according to the Hindu belief, having to pass seven stages of life.

Having now spoken in passing of the connection between art and the social requirements of mankind, we may go back for a moment to the appeal of art on which something has been said. In addition to the artistic appeal, and the magical significance connected with various sculptures, there is further the spiritual connection which goes further than mere art or magic. The representation brings the deity into concrete relation with man 'through the sympathetic forces of the image.' As Mr. Hirn aptly remarks, 'A work of art always gives to the spectator and no doubt also to the creator, an illusion of reality.'

It is this sense of reality that is aimed at in most forms of the so-called idol worship. To the worshipper, the idol is a visible presence. His spiritual needs are satisfied when he offers his respects in front of the idol. But though the idol

is thus treated, the idol does not have any value of its own. It is because of the belief that the deity takes possession of the stone that the stone is treated with great respect. By virtue of its form alone, no stone is sacred; 'it acquires divine power only by being put into material connection with the deity. The god is certainly supposed to feel a special temptation to take up his abode in the idol made in his image . . . . in the island of Nias, the spirit of the deceased is conducted to his statue by means of some small animal which has been found in the neighbourhood of his grave.' (Yijo Hirn: *The Origins of Art*).

Art leads to rituals. The ritual is practised because it satisfies several human needs. Symbolic art is a feature of rituals. Most of the idols we see in our temples are representations of men's ideas of various deities. These deities have different rites. And these different rites require special manifestations in shape, etc. For example Siva is depicted in some temples as a dancer. This manifestation or avatar has peculiar rites attached to it. Thus to worship this particular manifestation on this or that particular occasion constitutes the essence of a ritual. It gives the worshipper too a peculiar satisfaction to conduct different forms of worship on different occasions with different objects of worship. The principle of analogy (like produces like) comes into operation. When turmeric is used on marriage and other lucky occasions, it is a symbol of fertility. Later on, this symbolic rite is believed to produce real fertility. Corn is often a symbol of immortality, and when on ceremonial occasions it is used, it is believed that the family would continue to the end of time.

The symbol is often the expression of the control of man over nature. It is a matter of common knowledge that the belief in man's ability to control nature is widespread. A symbol is often met with testifying to this belief. Arrow-head symbols are found in many parts of the world to represent thunder. Indra's thunderbolt is very often represented by a spear. Certain charms are represented in the form of arrows facing different directions, and these charms are connected with gods controlling nature. There is magical significance attached to the cardinal points. Most Hindu gods, in fact all of them with the exception of one, face the east. The exception is Dakshanamurthi who faces south for special reasons. Marriage couples are made to face east when they sit in the marriage booth. Dead bodies are buried north to south. Houses are built facing a certain direction and each direction has a special significance attached to it. Dr. Mackenzie writes, 'In Egypt, natural phenomena suggested to man the idea that certain influences emanated from the cardinal points . . . . certain deities were identified with these influences, and they came to be regarded as controllers of them.' In India too, each point on the compass is presided over by a deity. To propitiate that deity, and invite his help, offerings are often made. The nine deities which in many temples are represented in a corner, are of this kind and people often worship them.

Whirlwinds and whirlpools are copied by people who make spiral movements. The spiral movement is considered to be of great magical virtue. The peacock is supposed to bring rain by its circular movements. Many other things prefer the

spiral motion. So man thinks that the spiral motion is unusually powerful in bringing about desired effects. The devotee in the temple goes round and round the idol. The Brahman before he begins to eat, describes a circle round the leaf with drops of water. The magician removing the evil eye of a child waves a camphor (in a spiral manner) before it.

We hear of writings in caves. Caves are mysterious in nature. By writing in them, man was under the impression that he was creating power, 'on the analogy of mysterious potency in the womb.' Similar in character are the symbols of the 'deep.' The gods are often said to be born in the 'deep'. Allusions to this are very frequent in the Indian books. Hiranyagarba moved or floated in the waters. Rudra is referred to 'as putting the waters in motion'; Brahma is said to be seated on the lotus flower (a reference to the inner side of the lotus flower which is of the nature of a recess). The whirlwind also was a source of natural energy. The spiral was a 'birth symbol'.

Writes Dr. Mackenzie, 'The ancient custom of making a sacred circuit to the right appears to have been intended to stimulate the Great Bear constellation to revolve in the proper direction. There was a danger—so it was believed—that it might jam or else spin in the wrong direction . . . . The ceremony of encircling sacred objects and places was sometimes a spiral movement . . . . By following the course of nature, the magic-workers not only assisted nature, as they believed, but procured for themselves an accumulation of "good-luck"—that is, every thing man desired, health, food, prosperity, etc. . . . By inverting the course of nature the magic-workers either performed a ceremony of riddance, or invoked the forces of evil.'

We may now consider the psychological motive underlying the symbols of natural phenomena. It is none other than the familiar one of self-preservation. By using the term self-preservation we are including almost all the instincts, for it is held that ultimately self-preservation is the genus under which we may class all the other instincts. Man's motive is always a selfish one. He adopts himself to his environment because of his desire to keep his skin and bones intact. The words of Dr. Mackenzie quoted in the last paragraph bear witness to this tendency.

Another point we have to remember is that though a person knows a particular symbol to be inadequate or meaningless, he yet lets it continue as a symbol because he does not like to destroy the illusion he and others were under. An example will make this clear. A man underwent an operation recently and the doctor said that he may probably have a temperature in the night. His relatives dared not touch him lest he *should* have fever, and would rather let him suffer than destroy their belief that everything was well. When a person known to us turns out to be different from what we thought him to be, we have all felt a peculiar kind of sadness and disappointment. Our mental organization suffers a rude shock. To prevent a similar shock, the symbol is allowed to have its original significance. Even apart from this, the very symbol is an illusion. It is not a reality. It is supposed to be real and people treat it as real.

The symbol is thus merely a social convention and a religious convention. All the members of society acquiesce in that convention. It is therefore a bond of union among the members of a society. It is a convention because it is a convenient form to hold the attention. Attention is preserved by definite form and the symbol being a definite something succeeds in this direction. The symbol is therefore an aid to conative activity of a kind.

It will be seen that symbol-making is a response to the play instincts. Imagination itself is a kind of play response, and a symbol is the outcome of such a response. It is an object of religion or art only secondarily and its being either depends on association of ideas. But primarily it is a play response and affords amusement to the creator and enjoyer alike.

The symbol (it is forced upon us), is just a short-hand expression of the intellectual conquest of man. In fact, I believe that, if we know the various symbols that were and are being used since the beginning of man, we could construct a history of civilization. The amount of meaning concentrated in a particular symbol is the measure of man's intelligence. A repetition in use of the various forms of symbols help to fix them in the mind of the race. As the historians of a country are its people (since they preserve the customs of the country), so the symbols in use mark the stages of intellectual development of the race.

Thus, we find that the symbol which is essentially the representation of an idea with a view to its better understanding stands for more than a mere representation. It satisfies certain instinctive needs, has its emotional appeal and is not devoid of conative bearings. It is a highly intellectual mechanism.

MADRAS. K. BALASUBRAMANIAN.

Moral and Religious Concepts in Courts of Law[1]

A few months ago I happened to send a notice of demand by ordinary post to a friend of mine on behalf of an institution of which I am a responsible officer. As the notice was not in the first instance heeded, I sent a similar notice to him by registered post, and in order that such a procedure might not annoy him, I added a postscript to the effect that I adopted this method of despatching the notice in order merely to ensure its safe delivery. This time there was a prompt reply to my letter, but my friend did not forget to add in his turn a postscript to the effect that he was not a bit annoyed at my sending the notice per registered post, since he was conscious of the fact that lawyers were merely 'dry bones.' I think that my friend was simply voicing the sentiments of the layman that lawyers are a feelingless and a heartless set of persons.

Another impression that lurks in the minds of the common people is instanced by an anecdote which Attorney-General Sir Douglas Hogg has narrated regarding a clever lawyer, who, addressing a class of law students, tried to bring home to them the virtue of interpreting with hair-splitting exactitude the statements and averments made in Courts of Law. By way of illustration, the lawyer put the following question to his hearers:—'Supposing I told you that three frogs were sitting together on a log of wood, and one decided to jump off, how many frogs do you think would be left on the log?' 'Two,' shouted the students. 'Wrong' corrected the lawyer. 'The frog I specially referred to only decided to jump off. He did'nt jump.' It is no wonder that the man in the street considers the lawyer as a being who delights in quibbling and in juggling with words.

There is a third impression that you can hardly efface from the minds of persons who have had some business or other with lawyers. I was struck very forcibly the other day with an idea that was conveyed in the pages of a humourous journal, wherein a lawyer was defined to be: 'One who defends your estate against an enemy in order to appreciate it himself.' In other words, a lawyer is associated in the popular mind with a leech or vulture.

The same humourous journal gives us a definition of the word 'mortgage', which instances yet another impression that the common people ordinarily entertain regarding lawyers. The definition runs thus:—'The word *mortgage* is derived from the French word *mort* meaning death and the English word *gag* meaning to choke. It denotes a lawyer's invention for choking property to death.' In other words, a lawyer is supposed to indulge in ruinous technicalities.

[1] An address delivered before the Madras Christian College Day Association, 31st December, 1927.

The courts of law do not fare better at the hands of the laity. I remember having read some time ago an incident recorded in the life of one of the Lord Chancellors of England. A distinguished Frenchman, alighting at one of the railway stations in London, picked up a cab which was in charge of a veteran cabman whose experience in his profession extended to over three decades. The visitor asked the cabman to drive him to the courts of justice. 'Courts of justice' cried the cabman. 'I do not know of any in England.' The Frenchman was perplexed. The cabman smiled and said, 'Oh, you perhaps mean, sir, the courts of law; well, get in, and I shall drive you over there.' The laity in India have no better opinion regarding the courts of law here than what was entertained by the English coachman. The judicial tribunals, in their view, do not dispense justice, but dispense with it, and merely administer rigid and oppressive rules of law.

Then, again, truthfulness is considered to be a commodity rarely found in the courts of law. The humourous weekly, from which I have already freely drawn, defines a lie as 'a very poor substitute for truth, but the only one discovered up to date!'

I have spoken so much about the popular impressions regarding the courts of law and the lawyers, because the purpose of my discourse this morning is to controvert, if I can, such ill-founded notions by indicating, as briefly as I can, the fact that lawyers and persons who administer the law are after all men of like passions as the laity, and that moral and religious concepts have not been ostracized from the courts of law or from the minds of lawyers.

After all, what is law? It is merely a set of rules of human conduct based upon moral or religious principles and enforced by the courts. I am aware of the fact that this is not a strict and orthodox definition of law, according to jurisprudence. It however, approximates as closely to the exact definition of law as π nearly equals $\frac{22}{7}$ in the formula giving the area of a circle. One reason why there has been so much misapprehension regarding law, lawyers and law-officers is because legal experts are so unwilling to hold that law cannot exist without morals or religion. Take, for instance, the great pioneer in the region of scientific study of jurisprudence—John Austin. In his classical book on jurisprudence, Austin speaks of three sets of rules which he considers to be really distinct from each other. They are styled as the law of God, positive law, and positive morality, and these really correspond to the three terms which I have used in this address, viz., religion, law and morality. What Austin has failed to appreciate is the fact that all these three entities are inter-related. His attitude towards them has constrained him to be at pains to show that 'the law of God, positive morality and positive law sometimes coincide, sometimes do not coincide, and sometimes conflict.' This he need not have done, if all these three were taken to be parts of one great whole, overlapping each other at certain points.

Take any rule of law you may, you will find that it is traceable to some principle of religion or morality. Savigny, the great German jurist, rightly remarks that law lies indebted in the moral and religious consciousness of the people. Now, for instance, why should law prohibit cruelty to animals, if the

law-giver was not swayed by the feeling that cruelty to animals is repugnant to moral and religious sentiments? Why should the courts of law invalidate an agreement, when it is proved that in the formation thereof one party has practised fraud upon the other, if fraudulent conduct was not considered by the legislature to be opposed to morality and religion? Why should the legislature taken upon itself the task of administering the religious endowments of the country if our law-givers had not felt that such institutions ought to be looked after carefully for fostering the religious and moral welfare of the people? I can multiply instances indefinitely to show that law is not isolated from religion or morality, but that on the other hand it is a powerful instrument for enforcing moral and religious principles. But the time at my disposal is utterly inadequate for this purpose. I shall however just elaborate for a little while the idea that I wish to press before you this morning that courts of law do not merely administer the law but further have in their hands weapons which they can wield effectively for protecting or advancing the moral and religious sentiments of the people, and that they have not closed their eyes to the fact that there is an all-pervading divine impulse which is constantly watching over and guiding the people. It is true that the legislature and the courts of law profess that they do not concern themselves with the morals and the ethical ideals and the religious beliefs and tenets of the people, but in practice they often act otherwise. Look, for instance, at the significant explanation appended to Section 9 of the Code of Civil Procedure 1908, which states that a suit in which the right to property or to an office is contested is a suit of a civil nature, notwithstanding that such right may depend entirely on the decision of questions as to religious rites or ceremonies.

I think that the erroneous notions which people entertain regarding the lawyers and the courts of law are mainly due to the fact that lawyers and law-givers and judges fight shy of the words 'religion' and morality,' although in the exercise of their respective functions they use and put into practice expressions which are merely paraphrases of either or both of the words 'religion' and 'morality'. It seems to me that our modern lawyers are as fond of fictions as their ancients in this line were, and this fondness they are frequently delighting in even at the risk of their popularity, which they can easily obtain and maintain if only they were a little more outspoken. Some of the names which they have used to denote in reality religion or morality are: (1) justice, equity and good conscience; (2) public policy, and (3) natural justice. I shall now very briefly examine these terms, in order to draw your attention to the fact that these expressions are practically synonymous with moral or religious principles.

Now, as regards the expression 'justice, equity and good conscience', the High Courts and their subordinate Civil Courts in India are empowered by statute to administer 'justice, equity and good conscience' in cases where legal principles are not available for deciding a particular point coming up before them for adjudication. In connection with the various kinds of jurisdiction exercised by the High Court of Judicature at Madras, the Letters Patent applicable to this Court

speak not only about the administration of law but also about the administration of equity and rules of good conscience.

In the Madras City Civil Court, it is provided that all questions arising before it shall be dealt with and determined according to the law administered in the Original Side of the High Court. Inferentially therefore the City Civil Judge can have cases before him wherein he may be called upon to enforce rules of justice, equity and good conscience.

For the Mofussil Courts, it has been enacted that, when it is necessary to decide any question regarding succession, inheritance, marriage or caste or any religious usage or institution, the Muhammadan law in cases where the parties are Muhammadans and the Hindu Law in cases where the parties are Hindus or any custom having the force of law or governing the parties or properties concerned, shall form the rule of decision, unless such law or custom has been altered or abolished by the legislature, but that, in cases where no specific rule exists, the courts shall act according to justice, equity and good conscience. From these legislative provisions, we cannot help drawing the inference that the phrase 'justice, equity and good conscience' must refer to rules of morality or religion, taken note of and administered by the judge in cases where the law is silent on any point referred to him for decision.

In a full bench decision of the Allahabad High Court, C. J. Edge has attempted to explain the expression 'justice, equity and good conscience' in the following manner:

> The words 'justice, equity and good conscience' are conflicting terms; but before a judge applies what may appear to him at first sight to be in accordance with justice, equity and good conscience, he must be careful to see that his views are based on sound general principles and are not in conflict with the intention of the legislature, or sound principles recognized by authority.

Now this is really answering a question by asking another question. You ask the learned judge, 'what is the meaning of the term "justice, equity and good conscience"?' He tells you that the question is answered if you can answer for yourself what 'sound general principles' are. I have no doubt that, in using these words, the learned judge had in mind 'sound principles of morality'; but, as I have tried to point out to you, the love for a fiction is inherent in a lawyer, and in right lawyer-like fashion His Lordship has avoided the word 'morality' and has deliberately used the synonymous words 'sound general principles'.

C. J. Jenkins, in a case that came before him in the Calcutta High Court has said:

> The rules and fictions which have been in many cases adopted by the common law courts in England for the purpose of obtaining jurisdiction in cases which would otherwise have been cognizable only by the courts of equity, are not necessary to be followed in this court where the aim is to do complete justice in one suit . . . . In India we are free from the trammels, and we are guided in matters of procedure by the rule of justice, equity and good conscience.

In other words, His Lordship recognizes the fact that if complete justice is to be administered in Courts of Law, they can ill afford to overlook principles of morality and religion.

For the term 'public policy', I shall content myself with referring you to Section 23 of the Indian Contract Act IX of 1872 which enumerates the cases where the consideration or object of an agreement is unlawful, and one of these cases is where the consideration or object is opposed to public policy. Now what else is meant by the expression 'public policy', if it does not mean a rule of morality? An instance in point is reported in a recent Bombay case where a custom which permits a dissolution of the marriage tie by either husband or wife against the wish of the other, the sole condition being the payment of a sum of money fixed by the caste, is held to be void as being opposed to public policy that is, as being opposed to good morals. As the principles of morality vary in different parts of the country and at different times, it is interesting to note the following words in the judgement of a case reported from the Bombay High Court, which I quote here as another instance of judges dreading a straightforward use of the word 'morality':

> 'Public policy' is a very uncertain term. What is public policy at one time may not be a sound public policy at another time. Special care is to be taken to determine what is public policy and what is not.

The term 'natural justice' occurs in Section 13 of the Code of Civil Procedure, 1908 which specifies the cases in which a judgement pronounced by a foreign court of law is not conclusive as to any matter thereby adjudicated. One of these cases is where the proceedings in which the foreign judgement was obtained are opposed to 'natural justice.' Now what is natural justice if it is not morality or religion? On this subject an expert commentator rightly remarks:

> Foreign judgement must not be contrary to natural justice. It is never advisable to limit the meaning of wide terms intentionally used by the legislature. The words are wide enough to allow of an investigation into the moral rightness of the decision.

May I now invite your attention for a while to the fact that the courts of law pay due regard to the popular consciousness of God's presence in the courts, and to the religious belief of the people that God himself is constantly abiding in the objects or institutions that have been consecrated or dedicated to Him? The Indian Oaths Act 1873 supplies us with one of the most effective guarantees that can be adopted in a court of law for making a party or witness speak the truth. Not an hour passes in a court of law without an oath or a solemn affirmation being administered to him by which he binds himself in the presence of the Almighty God to speak 'the truth, the whole truth and nothing but the truth.' An old English decision aptly defines an oath as 'A religious asseveration by which a person renounces the mercy and imprecates the vengeance of Heaven if he does not speak the truth.'

In this connection I am reminded of the following anecdote which I came across some time back in a local newspaper. In a colonial law suit it was necessary to call a Negro cook as witness. The judge asked the usual questions before the oath was administered:

> 'Do you know what will happen to you if you tell a lie?'
> 'Yes, sir. I shall go to hell, and burn there for a long while.'
> 'Quite so. And if you tell the truth?'
> 'We lose the case, Sir,' was the prompt reply.

Now I am aware of the fact that many figure in our courts of law in the same manner as the negro witness. Many are prepared to swear away their whole being and commit themselves body and soul to the horrors of hell. But in a majority of cases, when an oath is taken, the parties speak the truth, and this is particularly the case where what is known as a 'special oath' is administered to them.

In the Oaths Act a distinction is made between an ordinary oath or affirmation, which every witness is bound to make in a court of law, and a special oath or solemn affirmation which comes under Sections 8 to 12 of that Act. It is provided in these Sections that if any party to or witness in any judicial proceeding offers to give evidence on oath or solemn affirmation in any form common amongst or held binding by persons of the race or persuasion to which he belongs, and not repugnant to justice or decency and not purporting to affect any third person, the court may tender such an oath or affirmation to him. If any party offers to be bound by any such oath or affirmation, if it is made by the other party to or by any witness in such proceeding, and if such party or witness agrees to make it, the court may proceed to administer it or may issue a commission to any person to administer it or authorize him to take the evidence of the person to be sworn or affirmed and to return it to the Court.

These sections came for consideration before the Privy Council recently in the case of *Lala Indra Prasad* vs. *Lala Jugmohan Dass.* For the sake of convenience, I shall call the parties Prasad and Dass. In this case, Prasad who was the brother of Dass brought a suit against the latter for a partition of the family properties. The proceedings in the partition lasted for over ten years and underwent all the vicissitudes of a lengthy and wearisome law suit. But the battle was fought between the parties with great acrimony of feelings. We are told that at one stage Dass was actually cross examined for thirty-three days. The main result of the case was unfavourable to Dass, since it was found that he was indebted to Prasad to the extent of about two lacs of rupees; but at this stage an ill advised step on the part of Prasad turned the scales against himself. By a freak of inexplicable generosity, Prasad, when filing in Court his lists of joint family properties alleged by him to be in the possession of Dass, made the following offer: 'Lala Indra Prasad says he will give up out of his list such items as Lala Jugmohan Dass denies before the deity Latchmi Narasinghji.' Dass eagerly grasped the offer, and accepted it with avidity. The Court thereupon appointed a local commissioner who proceeded to Prasad's house, and in the presence of Prasad and the deity Latchmi Narasinghji he recorded the admissions and denials by Dass of the items in the list filed by Prasad. You may be sure that Dass was made of the same stuff as the negro witness, and he flouted the vengeance of Latchmi Narasinghji and swore to the best of his material advantage. The result was that the tables were entirely turned, and that, instead of Dass's being indebted to Prasad, Prasad was caught in the meshes of the special oath offered by him to his brother under the Oaths Act and was fixed on to a liability to the extent of nearly a lac of rupees, based on the sworn statement of Dass. Prasad was now thoroughly alarmed, and clutched at the straws that floated in his way along the

current of legal consequences that flowed from the enforcement of the terms of the Oath Act. His struggles were of no avail, and judgement went against him. Prasad now appealed to the Privy Council, but the decree of the lower court was confirmed. The judgement of the judicial committee in the case affords very nteresting reading, and is filled with the concept that the deity Latchmi Narasinghji was a veritable symbol of the living God. Prasad tried again, on his appeal to the Privy Council, to wriggle out of his obligation under the decree by pressing forward several arguments to the effect that the terms of the Oaths Act were not complied with; but these arguments were not accepted by the Privy Council because as I read the judgement, they ran counter to the religious concept that I have referred to just now. In one portion of the judgement, their Lordships say:

'It is asserted that the deity (Latchmi Narasinghji) was not present on that occasion. His *dibba* (the box in which the idol was located) was in the *kothri* (the chamber of worship), but the deity was not himself within it. To this assertion their Lordships can give no countenance. The plaintiff and the defendant acted as if they both believed, as their Lordships cannot doubt they did that the deity was present in the *dibba*. If, to the knowledge of the plaintiff, the deity was not so present, the whole proceedings were reduced to a farce, if not to something worse.'

You will thus see that the Privy Council has delivered its judgement on the assumption that the deity was in a mysterious way present on the occasion. When it was contended by Prasad that the deity was not actually invoked to bear witness, their Lordships of the Privy Council brush aside that argument on the ground of another religious concept, akin to that of the Hebrews, that the God of Israel neither sleepeth nor slumbereth. In doing so, their Lordships refer with approval to the following remarks of the trial judge:

'The very presence of God or idol on the spot, when the statement was made, so to speak, within his sight and hearing, was tantamount to his invocation by name in case of his absence. When the God or idol had been brought purposely on the scene to witness the statement of the defendant, it was by no means necessary to call him to bear witness, for, having been brought to the scene, he could not be suspected to be inactive or asleep.'

In the case of Hindu religious institutions, like temples, the ideal person is the idol itself, so that the mahant of a temple is only an agent of the deity; that is to say, God is the proprietor of the institutions and the mahant is but his servant. The latter is not a trustee for the deity, but is only a manager. So also in the case of wakf properties, which are vested not in the Muthavalli or Sajja da Nashin but in God Almighty Himself. This religious concept is well emphasised in a recent Privy Council case, *Sir Vidya Varuthi Theertha Swamigal* vs. *Balusawmy Iyer*. The following passages from the judgement of the Privy Council may interest you. Says Mr. Amir Ali in delivering the judgement:

It would be a serious inroad into the rights of Hindus and Muhammadans if the rules of Hindu and Muhammadan laws were to be construed in the light of legal conceptions borrowed from abroad, unless perhaps when they are absolutely so to speak *in pari materia*.

A trust in the sense in which the expression is used in English Law is unknown in the Hindu system pure and simple. Under the Hindu Law, the image of a deity of the Hindu pantheon is, as has been aptly called, a 'justice entity' vested with the capacity of receiving gifts and holding properties. Religious institutions, known under different names, are regarded as possessing the same juristic capacity and gifts are made to them *co-nomine*. . . .

When the gift is directly to an idol or a temple, the seisin to complete the gift is necessarily effected by human agency. Called by whatever name, he is only the manager and custodian of the

idol or the institution. . . . In no case was the property conveyed to or vested in him, nor is he a trustee in the English sense of the term.

So also, the Muhammadan law relating to trusts differs fundamentally from the English law. It owes its origin to a rule laid down by the prophet of Islam, and meaning 'the tying up of property in the ownership of God the Almighty and the devotion of the profits for the benefit of human beings.' When once it is declared that a particular property is wakf, the right of wakf is extinguished, and the ownership is transferred to the Almighty. The donor may name any meritorious object as the recipient of the benefit. The manager of the wakf is the Muthavalli, the governor, superintendent or curator. But neither the Sajja da Nashin nor the Muthavalli has any right in the property belonging to the wakf; the property is not vested in him, and he is not a trustee in the technical sense. In view of this fundamental difference between English and Hindu and Muhammadan laws, the rules of law applicable to wakfs and Hindu religious endowments are exempted from the Indian Trusts Act II of 1882.'

This religious concept was acted upon by His Lordship Justice Ramesam when answering in the affirmative the question that was put recently to the Full Bench of the Madras High Court as to whether Section 9 of the Madras City Tenants Protection Act III of 1922 (before its recent amendment) applied to landlords who held their lands as trustees of religious institutions. In this case, His Lordship held that the plaintiff was really the idol of the temple, that the landlord of the suit land was undoubtedly the idol of the temple within the definition of the term landlord in sub-section 3 of Section 2, and that, that being so, there was no difficulty in applying the explanation to Section 9 to the suit land.

Several legal principles follow this religious concept. For instance, 'the principle of Hindu Law which invalidates a bequest other than to a person in existance at the death of the testator does not apply to a bequest to the trustees for the establishment of an image of a deity after the death of the testator.' The reason is that God is a living being who never dies and is obviously a person in existence at the death of the testator. 'Such a gift is valid, though the image is to be established and consecrated after the testator's death.' This is, I think, because the deity lives independently of the image which is but his symbol. For similar reasons.

(*a*) 'The destruction or mutilation of the image does not affect the endowment. A new image may be established and the endowment kept up. The actual installation of an idol in a temple or the construction of a temple is not absolutely necessary for validating the settlement in favour of the idol'.

(*b*) A distinction of property for religious or charitable purpose is not invalid because it transgresses against the rule which forbids the creation of perpetuities.' For the dedication is by its very nature perpetual, since God has no beginning and no end.

(*c*) An endowment is not invalid because it is to take effect after the determination of an estate for life.' For God is a Being in existence at the time of the creation of the life interest.

(*d*) It has been held by a Full Bench of the Allahabad High Court that a suit in respect of a property held by an idol should be brought *in the name of the idol*, as represented by shabait. For the idol really stands for the eternal Being who is deemed to be a living personality in the courts of law.

In closing I should just like to remind you that these three sections in the procedural enactment of the legislature give very wide powers to the courts of law in the exercise of which they bring considerations of morality to bear upon their decisions. These deal with the awarding or disallowing of costs, with the granting of compensatory costs in respect of false and vexatious claims or defence, and with the preservation to the Courts of an inherent power to make such orders as may be necessary for the ends of justice and to prevent abuse of the powers of the court. With reference to the last mentioned section, may I add this that the courts of law in India have recognized, without contesting the validity of such a jurisdiction, that 'the court has, in many cases where the circumstances require it, acted upon the assumption of the possession of an inherent power to do that justice for the administration of which it solely exists'.

So you see that law after all does exist in amity and brotherhood with religion and morality, and lawyers are not such despicable creatures as people often take them to be.

S. Balasingam Satya Nadar.

Madras

The Malabar Drama

Kerala or Malabar comprising British Malabar, Cochin and Travancore, is a patch of territory as interesting to the antiquarian and the anthropologist as to the globe trotter and sight-seer. It preserves to this day, despite the onslaughts of modern civilization, its old world institutions, such as its games, theatrical representations, laws of inheritance and marriage, although every one of these is gradually undergoing great transformations. Though in point of literature, Malayalam is poorer than Kanarese, and poorer still than Tamil and Telugu, it has preserved for us certain forms of dramatic poetry which are lost to Tamil and which throw considerable light on the earlier dramatic works in that ancient language. The dramatic effusion of a people being an unconscious but true reflection of their civilization and thought, the achievements of the Malayalis in the histrionic art have, therefore, more than a mere academic interest. They give us a glimpse, however dim, into the ancient history of a section of the Dravidian race.

Love of pleasure is coeval with the beginning of man, nay, it is almost instinctive with all sentient beings. With all his contempt for this transient world, and in spite of his transcendental philosophy, the Hindu is as keenly alive to the pleasure of life as any other man. The pursuit of knowledge, pure and simple, unmixed with pleasure, is irksome, but when combined with the fine arts, it is both pleasant and profitable. The aesthetic consciousness in man manifests itself in various ways. Poetry, sculpture, painting, acting and music have really made life worth living, for in them are to be found the never ending sources of harmless pleasure. In the drama, the co-operation of *abhinaya* or acting, *kavita* or poetry, *sangita* or music, is brought into play. Of the three, the art of acting is the most indispensable to the dramatic. The drama has developed out of dancing, though the two arts have not developed *pari passu*. The combination of poetry and music in the drama is almost accidental.

The drama in Malabar as perhaps in the rest of world's literature, is to be traced to religion. The words *nata* (actor) and nataka (play or drama) are derived from the verb *nat*, the Prakrit form of Sanskrit *nrit*, to dance. The art of dancing in India, which is a preliminary to *abhinaya* or acting is very ancient, and has a divine origin attributed to it. Siva has his *thandava* dance, his consort Parvati, her *lasya*, and Krishna his *rasakrida* or cyclic dance. Bharata is the accredited inventor of dramatic entertainments in India, or at any rate, the first codifier of the science. His work is called *natya sastra* and sometimes *natya veda*. It is interesting to note that Bharata consists of three syllables, each having some significance *bha* stands for *bhava* (gesticulation), *ra* means *rasa* (vocal music) and *ta* stands for *tala* (keeping time by means of cymbals). There are three varieties of Bharatic representations, *nritta* or simple dancing

without gesticulation and speech; *nritya* or gesticulation without language, i.e., pantomime; *natya* or gesticulation with language, from which *nataka* or drama takes its origin.

The pure Tamil word for *nataka* is *kuthu*, which term is perhaps still retained in the Malayalam word, *chakkyar kuthu*, other verbal equivalents therefore being *attom* and *kali*, all these words being of Tamil origin. The first rude attempts at histrionic representations still keep possession of the several old castes in Malabar. The *chavattu kali* or *atavuchavittu* (dance on the ground), and the *kolekali* or *kolati* (stick dance) of the valans, the *vela* dance of the Parayans, the *panakali* of the Panans, the *kolamkettukali* of the Kaniyans, the *kaikothikali* of the Brahmans and the Nayars, the *patakom* and *kutiattom* of the Chakkiyars, and the *sastrakali* (familiarly known as *yatrakali*) of the Nambudiris are instances in point. The earliest beginnings of our drama have to be found in these mimic dances, accompanied in some cases by vociferous songs. Most of the *kalis* or plays of Malabar are of native growth. However worthless they were from the literary and histrionic standpoints, they entertained the family circles and amused the social gatherings. Some of them are the following:

1. *bhadrakalipattu.*
2. *tottampattu.*
3. *devendrappalla.*
4. *ammanakkali.*
5. *kolatikkali.*
6. *kalyanakali.*
7. *ayvarkali.*
8. *parisakali.*
9. *kurakkali.*
10. *natayarikkali.*
11. *yezhamattakkali.*
12. *thumbitullal.*
13. *kallukali.*
14. *karikakkali.*
15. *thenkali.*
16. *thattumelkkali.*
17. *mohiniyattom.*
18. *irakkali.*
19. *andiyattom.*

It is in these shows that the first traces of a dramatic tendency are visible, but it is impossible to determine which evolved from which, or how the drama proper evolved itself from these. We are very much prone to look at the manners and institutions of ancient times through the false medium of our everyday associations of an advanced age. Unless we can look upon ancient institutions with the eyes of the ancients, unless we can transport ourselves in spirit to earlier times, all our conceptions of what was done by them must be dim, uncertain and unsatisfactory.

Most of the minor *kalis* above referred to, except the *mohiniyattom* and the *kaikottikkali* are confined to south and middle Travancore, and are quite unheard of in the rest of Malabar. There are about one hundred and fifty kinds of these *kalippattus* (action songs); but few of them have seen the light of publication. Their stories are mostly taken from those inexhaustible treasure houses of Indian national legends and myths, the *Ramayana* and the *Mahabharata*. *Krishnarjuna Yudham* and *Santana Gopalam* are the most well known of these songs. Most of these are after the model of the *kavadichintu ragam* in Tamil. The *atavuchavittu* has peculiar songs and *talams*. The use of pure Tamil words in these songs is

apparent and points to an early period when the influence of Sanskrit on Malayalam had not begun to assert itself.

We may now pass on to an account of some of the *kalis*; but it can only be imperfect, being based on oral reports from stray representatives of an old generation which has almost died out.

The *kolati* or *kolkali* is a dance in which a party of ten to fifteen persons move in a circle, around a burning lamp, with a stick in each hand, and strike one another's sticks singing and keeping time with their feet. In the Tamil and Telugu lands, this is maintained as a periodical study for the elder boys of pial schools, and is performed in connection with the *Vinayakachathurthi*, and the *Vijayadasami*. This obtains even now among the Pulayans and the Valans of Malabar. The author of the *History of Malayalam Literature*, Mr. Govinda Pillai, says that stories of the type of *Santana Gopalan*, *Krishna Lila* and *Kamsavadham* have been rendered into *kolatikkali* songs (Para 107. Part I).

The *vela* dance of the Parayans is performed in honour of Kodungalloor Bhagavati. They sing to the accompaniment of the drum and the flute.

The *panankali* is almost a regular play. It is acted all through the night and consists of two women actors and two men actors.

The *kolamkettukali* belongs to the Kaniyars, the hereditary astrologers and mantravadins of Malabar. It is performed after the first quarter of the night, the party consisting of men and women. It is more or less a devil dance, accompanied by blood-red scenes got up by preparing a boiled solution of chunam and turmeric.

The *kaikottikali* is confined to the women of the higher classes, the Nairs and the Brahmans. It is a circular dance accompanied by singing, in which ten to thirty girls take part at a time.

The *thiruvatirakkali* is in commemoration of Kamadeva, the cupid of our mythology, who, as the story goes, was burnt to ashes by the great God Siva. A number of young ladies meet in a tank early morning on the *thiruvatira* day in Dhanu (December—January) and plunge in the water. They sing and play in the water until the peep of dawn. Their singing closes with *polappattu* which is in the form of a dialogue between a caste lady and her slave woman.

The *bhadrakalipattus* or *thottampattus* are sung in praise of the goddess Bhadrakali in Palghat and in the neighbouring parts of Trichur. There are certain dances also in connection with them. They had originated before the fourth century A.D. The *mannothukali*, *lalakali*, *kannyarkali* and *desattukali* are varieties of the dance. The dance lasts for three days.

The *ammanakalipattus* are among the oldest songs in Malabar. They must be traced to a greater antiquity as they are of the recognized species of the early songs of the Tamil land. The play consists of throwing up three or more balls of bell metal and catching them alternately by the right and left hand with great ease and dexterity.

The *ayvarkali* obtains only among the Thiyas or Eshavas of South Travancore. It is a representation of the story of the five Pandavas, each of whom is personated by an actor. The entire story of the *Mahabharata* is rendered in easy songs to be

sung and acted to the accompaniment of hand drums called '*tappus.*' It is performed only in the day time, and is completed in two days:

The *andyattam* played at night with the help of a burning lamp, has but one player in it who does not open his lips.

The *kalyanakali* is performed on marriage occasions among the Nairs of South Travancore. To this day in the taluqs of Chirayankil, Neyyantinkara and Kuzhithura (in Travancore) there are regular troupes of these players called *sankhakkars.* The actors who have no special costume for the play sing merry songs and dance to the tune in many merry-go-rounds. The songs sung in all the above *kalis* are regulated by *matras* and not by syllables in each foot or padom.

The *yathrakali* or more correctly, *sastrakali* is performed by a section of the Nambudiris, called *sastrangakkar* or *kshattrangakkar*, on occasions of the first feeding ceremony of babies, of thread investing, marriage and the first anniversary of one's death among the Nambudiris. It is said to have originated about the year 3400 of the Kaliyuga. It has at present, religious, social and farcical elements combined with it. The *kali* propitiates chiefly Siva and Parvati, as well as Bhadrakali, Sasta, and Subramanya. It is of two kinds: (1) *kali and sastram* and (2) mere *kali.* In the first, the performers undertake the cooking business at the feast; in the second, they merely perform the play. The Nambudiris and the Malabar Pottis are trained in the art. In the first variety of the play, at about 4 p.m. on the day of feasting, some ten or fifteen of these men rush into the dining pandal, on the floor of which are scattered the remnants of rice and curry, and invert the empty, unwashed *chempu* or copper cauldron and continue to strike it with a ferule each, singing to the metallic music thereby produced. One of the party suddenly jumps off his seat, takes hold of a spoon, dances about, becomes inspired and assumes the rôle of Sir Oracle. He runs up and down the pandal, jumps up the cauldron, calls many 'hips and hurrahs', and breaks a cocoanut. At night-fall four of the party circumambulate a burning lamp in the parlour of the host's house and sing songs in praise of Bhagavati. This is called *nalupadam.* In the course of supper, they call out for certain edibles, which are less often than not, supplied to them. They also sing in long tones songs called *karislokas.* They also recite some 'royal commissions' or *neets* in prose indited by reputed scholars and based on puranic episodes. Supper over, preparations for the real *kali* are begun. They repair to a neighbouring temple or Nambudiri's house and put on the actors' dress and move in slow procession to the pandal. They reach the host's pandal, and sit round the lamp, and sing songs in praise of Ganapathi and Siva. This is followed by diverse kinds of dumb-shows and exhibitions of skill in swordsmanship. Certain songs, called *polivu* songs, are recited to the accompaniment of the studiously slow drumming of the *chenda* (drum). Till day dawn rude imitations of the Nayar soldier, *pandaram*, launderer and laundress appear on the scene and play several farcical parts. With the rise of the next morning sun, all this is over. The songs are mostly in pure Malayalam, though there is a large admixture of Sanskrit words in those composed recently.

It is interesting to inquire into the connection, if any, between this *yatrakali* and the *jatra* (*yatra*) of the Bengalis, which latter is generally an exhibition of some of the incidents in the youthful life of Krishna, maintained also in extempore dialogue, but interspersed with popular songs. But it is impossible to say at this distance of time, if the *jatras* of the Bengalis did not find their way into Malabar through the Aryan settlers of North India during their migration hither and become the present *yatrakalis.*

If the nautch represents the beginnings of the Indian drama, we may well say that the *mohiniattam*, which answers to the *dasiattam* on the other side of the Ghauts, serves more or less the same purpose. The dancing party consists chiefly of a male leader, called Nathuvan, one Bhagavathar or singer, a drummer, and two or three Nair girls of low extraction who do the actual dancing, and whose limbs are trained for different postures and gestures. In this *attam*, only one *rasa* (emotion or sentiment) viz., *sringara* or the erotic, is brought into play and that perhaps of a rather low type. The girls exhibit certain signs by the fingers and dance more or less in accordance with the injunctions of Bharata. *Mrudangam*, *titti*, and *kuzhitalam* are the musical instruments used in the *attam*, which is performed at night. The *Chdkkiyarkoothu* is a peculiar institution of Malabar, more or less akin to the *Katha kalakshepam* of the East Coast. The Chakkiyars are hereditary actors. Their very occupation is to act plays in temple mandapams, called *kooihambalam*. They are the children of adulterous Nambudiri women, born after the commencement of their guilt. Boys, so born and invested with the sacred thread, are Chakkiyars, and those not invested Nambiyars. The unmarried daughters are classed among Nangayars, their origin could be traced to the beginning of the *Kaliyuga*. The Chakkiyar is a mimetic dancer; and his *koothu*, a monologue, mainly consists of a sort of combined recitation of, and commentary on, passages from the Puranas and the Ithihasas. Broadly speaking, the *koothu* originally included the acting of *natakams* or dramas. Their earliest patron was Kulasekhara Varma Cheruman Perumal, a Sanskrit poet and dramatist, whose plays, *Subhadra Dhananjayam* and *Tapatisam Varanam* as well as *Ascharya Chudamani*, *Naganandan*, etc., were put on the boards by them for the first time. This prince has composed for them a book called *Attaprakarom*, laying down canons for the *koothu* and fixing the *ankavila* (fees) therefor. The enacting of a play is called '*koodiyattom*,' and in this the Nangiyars take the female part. *Mattavilasam* and *Anguleeyankam* are only two out of the few *koothus* wherein a single actor appears. *Prabandhom* is the general name for the works used for recitation in the *koothu*. The *prabandhoms* are adaptations in Sanskrit of the Hindu Scripture, for the use of the non-Brahmans; and Melappathur Narayana Bhattathiri the great Sanskrit poet and author of *Narayaneeyam* in Sanskrit has composed about fourteen *prabhandoms*. Minor episodes are introduced in the *koothu* by the reciter.

The *koothus*, meant for the propitiation of the gods and the felicitation of men, form important items on the *utsavam* (festival) programme of almost every temple worth the name in Malabar. Private individuals also arrange

for these performances in temples, and meet their cost by way of discharging their vows. A single session of these *koothus* lasts 12, 20, or 40 days; and on no account exceeds 40 days. The belief is that liturgical recitations are as efficacious in obtaining salvation during the *kaliyuga* as divine service, and will be a check on the growing materialism of the iron age. The *koothu* is performed in the afternoons. A burning lamp is placed before the Chakkiyar; the only article of furniture is a three footed stool on which he now and again sits in the course of the performance. He wears a quaint headgear and an uncouth dress, his face is grotesquely painted with sandal paste and ashes, and his eyes with lampsoot. He has certain brummagem bracelets on the fore-arms and the feet. A Nambiar accompanies him and opens the *koothu* by sounding his big jar-shaped metal drum. The Nangayar sounds her cymbals occasionally. The Chakkiyar opens with a prayer, with gesticulations and well regulated movements. He cuts a caper or two. Though the entire audience may burst in laughter at the jokes cracked by the Chakkiyar at the expense of any particular individual, it would be a serious breach of etiquette, if the person so ridiculed replied to the Chakkiyar. The Nangayar should not even smile at anything that takes place at the *ambalam*; and if she infringes the rule the performance will be stopped at once.

The Chakkiyar is a rhapsodist having the gift of a good memory and strong common sense. He is a reciter, preacher, jester, cynic, satirist and connoisseur of public morals, all in one. He has an observant eye for men and manners. He recites epic poems very charmingly, with peculiar intonations and emphasis, all his own. The recital, in great part improvization, is acted and sung distinctly, and acquires a dramatic character by his introduction of hypothetical dialogues with imaginary interlocutors. There are elements of frank gaiety and amusing buffoonery, as well as serious heart thrusts and withering sarcasms. If his eloquence is energetic and sublime, his humour is coarse and broad, his personal satire stinging, his attack on social institutions acrimonius, vehement and even indecent. His allusions, elucidations, and gestures, for instance, in enacting the freaks of Ahalya and Indra, are broad and coarse—nay, positively immoral for any audience. His references to the posture of labouring women in confinement are simply demoralizing.

To make a skilful actor at *koothu*, it takes several years of hard study and training. The novice has to study Sanskrit *natakas*, the *Ramayana* and the *Mahabharata*, as well as Bharata's *Natya Sastra*. He has to spend about a decade in these studies and in physical training, such as squeezing his body into shapes, ogling, winking, staring etc. In certain kinds of *kudiattam* the jester has no place. But in those in which he has a place, there are four parts called *vinodam* (amusement), *vanchanom* (deception), *rajaseva* (service to Kings) and *asanam* (food), an explanation of which would take us too far. These can bestow *purusharltham*, *viz.*, dharma (duty), *artha* (wealth), *kama* (love) and *moksha* (salvation) on all who listen to them. Some of the *slokas* in Sanskrit are Bhartru hari's; the Malayalam slokas are by a Namburi Brahmin Tolakavi, a dependent of Bhaskara Ravi Varma, Perumal alias Kulasekhara. He was a satirist who made light work of all poets, whether they were princes or peasants.

In earlier days, every Chakkiyar had to proceed to Perunchellurgramam in Kolathunad, and to exhibit his skill at the Taliparambu temple before the Nambudiris, and to receive his *muti* or crown from the Chirakkal Raja. It is a matter for regret that the Chakkiyar *koothu* is going out of fashion. Divested of its later undesireable accretions, it would be an excellent institution and under proper guidance and control would make a potent factor in our religious and moral elevation, and a powerful instrument of education.

(*To be continued.*)

MADRAS R. V. PODUVAL

The Place of Virakurcha in the Pallava Genealogy

I

The Darśi plate[1] is an important document. It has either been completely neglected or received very little attention. The reason for this neglect is that it is only a fragment of an inscription which stops with the description of the great grandfather of the donor. Nevertheless, the document such as it is, is an important one. I shall, in the following paper, examine it in some of its aspects, and show that it solves certain difficult problems connected with the early history of the Pallavas.

The language of the inscription is Sānskṛit, which is a sure indication of the comparative modernness of its age. It mentions a Mahārāja Srī Vīrakōrcha-varman, the great grandfather of the donor. There is a great deal of doubt and uncertainty regarding the identity of this king; scholars hold different opinions regarding his position in the genealogy of early Pallava kings.

Dr. S. Krishnaswami Iyengar identifies him[2] with Vīravarman, the grandfather of Yuva Mahārāja Vishṇugōpa and Simhavarman of the Uruvapalli Plates.[3] Mr. H. Krishna Sastri at one time held the same view,[4] although he has completely abandoned it now, declaring that Vīrakūrcha must certainly have been an ancient Pallava king.[5] Although Dr. G. J. Dubreuil expresses the opinion in his *Pallavas*, p. 22 that 'the existence of a king called Vīrakūrcha is proved by the plate discovered at Darśi,' he does not even make a passing mention of this king in his *Ancient History of the Deccan* so that the reader of this book is entirely ignorant of the existence of Vīrakūrcha.

Who is this Vīrakurcha? There are two early Pallava kings of that name mentioned in the Vāyalūr pillar inscription, numbers 5 and 11 of Dubreuil's list.[6] The Vēlūrpāḷaiyam plates[7] make him the son of Chūta Pallava, and the father of Skandaśishya. His name is also mentioned in Kāśakudi plates.[8] These are however, comparatively recent documents. The most ancient inscription in which this king is mentioned is the Darśi Plate,[9] of an unnamed great grandson of Vīrakūrcḥavarman. From all this, it is quite certain that there existed at one time a king of the Pallavas called Vīrakūrcha or Vīrakūrchavarman. How this king is related to the other kings of the Pallava family is a difficult matter to determine. Unfortunately, there is no definite information on this point. Although his name is mentioned both in the Vāyalūr inscription and Kāśakudi plates, we cannot fix his place in the Pallava genealogy, as these inscriptions contain only a catalogue of unconnected names, which are sometimes fictitious.

1 E. I. Vol. I, 369.
2 *The Pallavas.*
3 I. A. Vol. V. p. 50.
4 S. I. I. Vol. II, Part V.
5 E. I. Vol. XIX.
6 *The Pallavas*, p. 20.
7 S. I. I. II. Part V.
8 S. I. I. II, p. 348.
9 E. I. Vol. I. 369.

It is obvious even to a casual observer of Vāyalūr inscription that it repeats not only the names of individual kings but also of groups of four or five. The Kāśakudi plates contain names which are not met with in any of the early Pallava grants. Therefore, these lists are untrustworthy, and cannot be relied upon, unless they are supported by other evidence of a more reliable character.

The Vēlūrpāḷaiyam plates give us a connected list of four kings: Vīrakūrcha, Skandaśishya, Kumāravishṇu, and Buddhavarma. There is a corresponding group of kings, Vīrakūrcha, Skandavarman, Kumāravishṇu, and Buddhavarman in the Vāyalūr inscription. The Chendalūr plates supply us with a similar list of kings consisting of Skandavarman, Kumāravishṇu (I) Buddhavarman, and Kumāravishṇu (II). From these, we have sufficient justification for concluding that there existed a group of Pallava kings consisting of:

Vīrakūrcha
|
Skandavarman
|
Kumāravishṇu (I)
|
Buddhavarman
|
Kumāravishṇu (II)

It must be remembered that according to the Vēlūrpāḷaiyam plates, the son of Vīrakūrcha is not called Skandavarman but Skandśishya. But Skandaśishya is generally taken to be only a variant of Skandavarman, and as we have no objection to this, we shall regard Skandavarman and Skandaśishya as the names of one and the same person.

II

Dr. S. Krishnaswami Iyengar, as we have already noticed, is of opinion that Vīrakūrchavarman is the same as Vīravarman, the grandfather of Yuva Mahārāja Vishṇugōpa, and his elder brother Simhavarman. This opinion is utterly untenable for certain important reasons. In the first place, it must be pointed out that the Pallava inscriptions never confound Vīravarman with Vīrakūrchavarman. They are always regarded as two different persons. Although the Vāyalūr inscription mentions Vīrakūrcha twice (5 and 11), it also mentions the name of Vīravarman far down in the list (23). The Kāśakudi plates mention two kings Vīrakūrcha and Vīrasimha. Even if it be argued that Vīrasimha is only a variation of Vīravarman, the names of Vīrakūrcha and Vīravarman are kept distinctly separate. The kings whose inscriptions are dated from Palakkada, Daśanapura, and Tambrapa are the direct descendants of Vīravarman. The Omgōḍu plates 1 and 2, the Uruvapalli, the Mangalur the Pikira, and Cūra plates mention only Vīravarman and not Vīrakūrchavarman. All the descendants of Vīravarman knew him only by that name and by none else.

Secondly, the fact that Vīrakūrchavarman and Vīravarman and different persons living in different periods of Pallava history is clearly seen by a study of the alphabet of some important inscriptions.

(1) The Hirahaḍagaḷḷi plates[1] of Śivaskandavarman. This is one of the earliest Pallava documents known to us. Dr. Burgess is of opinion that 'the characters closely resemble those used in Sir W. Eliot's grant of Vijaya-Buddhavarman's queen.' The alphabet of the Mayidavōlu plates[2] which is said to resemble that of Hirahaḍagaḷḷi is very archaic and ancient.

(2) The Darśi plates[3]: The alphabet of this inscription is in the opinion of Dr. Hultzsch very 'archaic,' and consequently ancient.

(3) The alphabet of Omgōḍu (1) plates[4] of Vijaya-Skandavarman according to Mr. H. Krishna Sastri, resembles that 'of the Uruvapalli, Mangadur and the Pīkira Plates.'

(4) The Uruvapalli grant is written in what are called true box-headed[5] characters; and we know that the grant was made in 446 A.D.

We have selected these four inscriptions in order to ascertain the probable age of the Darśi plate. The Uruvapalli grant was made by Yuva Mahārāja Vishṇugōpa; and the Omgōḍu (1) grant was made by his father Vijaya-Skandavarman. Therefore both of them belong to the first half of the fifth century A.D. The Hirahaḍagaḷḷi grant of Śivaskandavarman belongs to the earliest period of Pallava History. To what period does the Darśi plate belong? This can be decided by a comparison of the alphabet of these four inscriptions. Let us now compare the alphabet of the Darśi plate with that of the Hirahaḍagaḷḷi plates on the one hand, and with those of Omgōḍu (1) and Uruvapalli on the other. The alphabet of the Darśi plate is more modern than that of the Hirahadagaḷḷi plates and more archaic than that of the Omgōḍu (1) and much more archaic than that of the Uruvapalli plates. Thus this comparative study of the alphabets of the four inscriptions forces on us the conclusion that the Darśi plate must belong to the intervening period between the Hirahaḍagaḷḷi and the Omgōḍu (1) plates.

We shall now proceed to study some of the characters in these inscriptions. The chart opposite page 112 shows the development of test letters in them. The 'ka' of the Hirahaḍagaḷḷi plates is the same as the later Brāhmi 'ka.' In the Darśi plate it is not very much different. The curl at the bottom goes up nearly to two-thirds of the body of the letter forming a loop in the left. It appears in a more developed form in the Omgōḍu (1) plates. There is reason to believe that the Omgōḍu (1) plates like the Uruvapalli plates are written in what are called the 'true box-headed' characters. There appears to be a 'box' on the head of 'ka'; and the curl at the bottom has disappeared, its place being taken by a rectangle opening upwards. The Uruvapalli 'ka' is the same as the above; but the box and the rectangle are more fully developed. In Omgoḍu (2) plates, it bears a strong resemblance to the modern Tamil 'cha.'

The letter 'ga' in the Hirahaḍagaḷḷi plates is like a horse shoe standing on its legs. It slightly inclines towards the right. The right leg is a little longer than the left, at the end of which there is just a suggestion of a small loop to the

[1] E. I. Vol. 1, p. 2.
[2] E. I. VI, 84.
[3] E. I. I, 369.
[4] E. I. XV, 249.
[5] Dubreuil: *Ancient History of the Deccan*, p. 97.

right. This loop appears in a more developed form in the Darśi plate. In the Omgōḍu (1) and (2) plates, the 'ga' appears without the loop. In the Uruvapalli plates, the letter is without the loop. The legs are of equal length and bend towards each other; there is also a horizontal bar drawn on the top of the letter. In fact, the 'ga' of Uruvapalli is almost identical in appearance with the modern Telugu and Kanarese 'ga.' The loop which is seen in the Darśi 'ga' appears to be an archaic survival. In the Mayidavōlu plates,[1] the right leg of the letter is much longer than the left, it inclines a little to the left and ends in a small upward curve. The left leg itself bends in a semi-circular form towards the right . In the Konḍamūdi plates[2] the 'ga' resembles the 'ga' of Mayidavōlu; the left leg, however, ends in a loop towards the right.[3] The 'ga' of the Junāghaḍ inscription of Rudradāman is identical with the Darśi 'ga.' It is clear from these that the loop in the Darśi 'ga' is only a relic of the past.

The letter 'ja' of Hirahaḍagaḷḷi is like the modern English *E* of course, with its corners modified into curves. In the Junāghaḍ inscription,[4] it is just like the modern English capital *E*. In the Darśi plate it is the same as that of the Hirahaḍagaḷḷi plates, but the lowest arm of the letter shows the formation of a downward curve in its embryonic stage. In the Omgōḍu (1) and the Uruvapalli plates it is seen in a more developed form. In the Omgōḍu (2) plates, it is almost like the modern Telugu 'ja.'

'Ṇa' of the Hirahaḍagaḷḷi plates appears to be peculiar to that inscription. It is different from the 'ṇa' of the Brāhmi as well as the early Pallava inscriptions. It consists of two horse-shoe shaped curves standing back to back on their longer legs, which are connected with each other by a horizontal line bending slightly upwards. The 'ṇa' of Darśi is practically the same as that of the later Brāhmi inscriptions. It is more or less the same in the Omgōḍu (1) and the Uruvapalli plates; but in the Omgōḍu (2) plates its form is fully developed. It very much resembles the modern Telugu 'ṇa.'

The 'ta' of Hirahaḍagaḷḷi is just like 'ga' with a perpendicular stroke on its head inclining towards the right. It resembles the 'ta' of the Nāsik cave inscription of Ūshavadāta[5]. The 'ta' of Darśi appears to be quite different from that of Hirahaḍagaḷḷi; but it is the same as that of the Amarâvati Prâkrit inscriptions.[6] In the Omgōḍu (1) plates the tail of the letter terminates in a straight line instead of a curve. There is just a suggestion of a box on the top. The 'ta' of Uruvapalli is the same as that of Omgōḍu (1); but the 'box' on the head is bigger and the tail shorter. In Omgōḍu (2), it is like a hook with a nail shaped perpendicular stroke on its head.

In the early Pallava inscriptions, there appear two types of 'ba.' The 'ba' of Hirahaḍagaḷḷi is a more fully developed form of the 'ba' of the Brāhmi inscriptions which is a simple square. At the lower left hand corner of the letter, there is a short horizontal stroke slightly inclining downwards. The upper corner on the right is modified so as to form a curve, which, proceeding to the left,

1 E. I. VI, 84. 2 E. I. VI, 315. 3 E. I. VIII, 36.
4 E. I. VIII, 36. 5 E. I. VIII, 59. 6 E. I. XV, pl opposite to page 267.

terminates in a small loop, which, however, does not touch the perpendicular line below it. The 'ba's of Omgoḍu (1) and Uruvapalli appear to be developed forms of Hirahaḍagaḷḷi 'ba.' The Darsi 'ba' is very much like modern Telugu ဃ ; and the 'ba' of Omgōḍu (2) is a developed form of this. It must not be supposed that the Darśi 'ba' is less ancient than that of Hirahaḍagaḷḷi, for it occurs in the Kollēru Prākṛit grant [1] of Vijaya-Dēvavarman. Therefore, the Darśi 'ba' appears to be at least as ancient as that of Hirahaḍagalli.

The case of 'ra' is simple. In the Hirahaḍagaḷḷi plates, it is exactly like the modern English J. In the Darśi plate the body of the letter is shortened, whereas the tail is carried much farther up. In the Omgōḍu (1) plates the letter is like the English J; but the tail of the letter is a rectangle opening upwards instead of a mere curve. It is carried farther up than in the 'ra' of Hirahaḍagaḷḷi, though not to such a great height as in the case of Darśi. The Uruvapalli 'ra' is the same as that of Omgōḍu (1), only the 'box' and the rectangle are more definitely formed. In the 'ra' of Omgōḍu (2), the body of the letter is much shorter than in the others; and the tail forms of a loop instead of a rectangle, and it goes up almost to the top so as to touch very nearly the horizontal stroke drawn on the head of the letter.

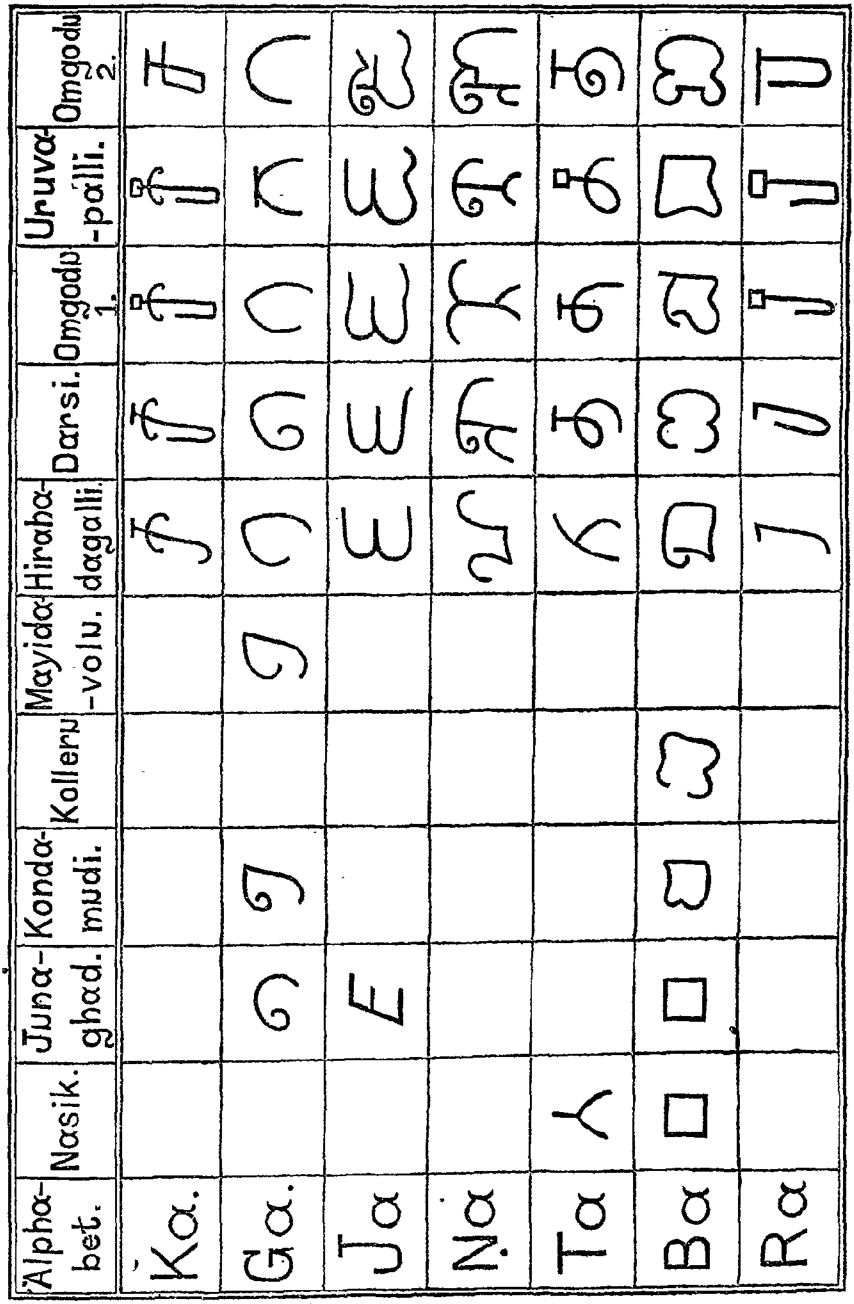
The foregoing study of the seven letters ka, ga, ja, ṇa, ta, ba, and ra shows that their forms are more developed in the Darśi Plate than in that of Hirahaḍagaḷḷi, and less developed than in those of the Omgōḍu (1), the Uruvapalli, and the Omgōḍu (2) plates. Therefore, the Darśi plate must have been issued later than those of Hirahaḍagaḷḷi and earlier than those of Omgōḍu (1) Uruvapalli, and Omgōḍu (2).

Now, the earliest inscription which mentions Vīravarman is the Omgōḍu (1) plates. As he is the grandfather of Yuva Mahārāja Vishṇugōpa we may assign him to the period between 385 and 410 A.D. The Darśi plate, as we have seen, must be assigned on paleographic considerations to an earlier period than the Omgōḍu (1) plates. Therefore, Vīrakūrchavarman the great grandfather of the donor of the Darśi plate cannot be the same person as Vīravarman, the father of Vijaya Skandavarman, the donor of Omgōdu (1) plates. Even if we grant for the sake of argument that the Darśi and Omgōdu (1) plates are contemporary documents (which they are not), Vīrakūrchavarman must have lived two generations earlier than Vīravarman, i.e., he must have been a contemporary of Kumāravishṇu of Omgōdu (1) plates. Even then it is impossible to identify him with Vīravarman.

The Darśi grant appears to have been made by Skandavarman, the father of Vīravarman or by one of his contemporary princes. It is probable that the donor of this grant was Skandavarman himself, as the Darśi fragment is dated from Vijaya Daśanapura, one of the three cities from which the descendants of Vīravarman issued their grants.

The impossibility of identifying Vīrakūrchavarman with Vīravarman has thus been established. We can now assert definitely that the Vīrakūrchavarman of the Darśi plate is no other than the father of Śiva-Skandavarman of the Hirahaḍagaḷḷi

[1] E. I. IX, 56.


Alphabet.
Nasik.
Junaghad.
Kondamudi.
Kalleru
Mayidavolu.
Hirahadagalli.
Darsi.
Omgodu 1.
Uruvapalli.
Omgodu 2.
Ka.
Ga.
Ja
Ṇa
Ta
Ba
Ra

Allowing 25 years for a generation we arrive at A.D. 285 as the probable date of Vīrakūrchavarman.

III

However, M. Dubreuil, as we have already noticed, omits the name of Vīrakūrcha altogether in his reconstruction of the Pallava genealogy[1], in spite of the mention of his name in a number of inscriptions which he accepts as authoritative. He has not stated his reasons for this omission. His difficulty, however, appears to be this. Although Vīrakūrcha is said to have been a very early king of the Pallavas, such statements are found only in the Sānskṛit inscriptions, and the Prākṛit inscriptions do not know any king of that name. Moreover, his name appears in the Darśi fragment, and it does not fit in with the dynastic lists supplied by the other Sānskṛit inscriptions. Thus the Darśi fragment has become a stumbling block in his path, and he attempts to remove it by ignoring it altogether. The current theory of the government epigraphist regarding the interval between the Prākṛit and the Sānskṛit inscriptions appears to have led him astray. The government epigraphist supposes the existence of an interval of nearly two centuries between the Prākṛit and Sānskṛit inscriptions.

Mr. Venkayya assigns the Prākṛit inscriptions 'to the beginning of the fourth century A.D.' He seems to think that they could have been earlier. He says, 'The last Āndhra king was Puḷumāyi III., whose reign might have come to an end in A.D. 236. Consequently, the Pallavas may be supposed to have asserted their independence about the end of the century. It is, however, possible that the event took place much earlier.'[2] 'The Sānskṛit charters of the dynasty are later. . . . The time when the kings who issued Sānskṛit charters flourished is not known. But, roughly speaking they may be assigned to the fifth and the sixth centuries A.D.'[3].'

Although the above is intended to be only a tentative theory, it has soon become the orthodox creed of the Epigraphical Department. Mr. H. Kṛishṇa Śastri accepts it and builds upon it another theory,[4] making a number of incorrect identifications.

The acceptance of this theory of interval forced Prof. Dubreuil to lengthen the pedigree of the Pallavas unnecessarily. His procedure in this connection is very arbitrary. He begins his reconstruction of the Pallava genealogy with the three or four names in the Prākṛit grants. He is right so far. He tacks on to them a Vishṇugōpa. It is true that a Vishṇugōpa is mentioned in the Allahabad Pillar inscription of Samudragupta[5] as the ruler of Kāñchi. But there is nothing in the Pallava inscriptions to show that he ruled after Buddhyānkura. The Vâyalūr Pillar inscription,[6] no doubt, mentions an early king called Vishṇugōpa (No. 8 of Dubreuil's list), but it does not mention any king of the Prākṛit inscriptions before him. There is nothing in the Pallava inscriptions to show that Vishṇugōpa had a son or a successor called Skandavarman. Professor Dubreuil makes Vishṇugōpa a connecting link between the kings of the Prākṛit and those of Sānskṛit charters,

[1] *Ancient History of the Deccan*, p. 70.
[2] Ibid, p. 223-24.
[3] *Arch. Rep.* 1906-7, p. 222.
[4] S. I. I. Vol, II. Part V.
[5] *Fleet Gupta. Inscriptions.*
[6] Dubreuil ; *The Pallavas*.

a procedure which is hardly justified by facts. He makes Śivaskandavarman of the Hirahaḍagaḷḷi plates, and Skandavarman of the Chendalúr plates two different persons, separated from each other in point of time by at least three-quarters of a century. In fact, they must be regarded as one and the same persons. Buddhavarman of the British Museum plates must be treated as a contemporary of Kumāravishṇu I, of the Chendalúr plates, and not as his great grandfather. This is supported by the Vēlūrpāḷaiyam plates[1] which make Kumāravishṇu a grandson Vīrakūrcha, the founder of the Pallava dynasty.

A fact which has not been noticed so far, and which is the cause of good many misconceptions regarding the early history of the Pallavas must be noticed in this connection. Almost all scholars have accepted that the Pallavas obtained royal power by the marriage of Prince Vīrakūrcha with a Nāga princess. We do not know what exactly their position was before that time. The Āndhrabhṛityas of Nāga origin were the masters of the Dekhan and Southern India between the Āndhras and the Pallavas. They belonged to the Cuṭu family. It is admitted by all that sovereignty passed from the Cuṭus to the Pallavas. This according to the Vēlūrpāḷaiyam plates was the result of the marriage of the Pallava prince Vīrakūrcha with a Nāga (Cuṭu) princess. The father of Vīrakūrcha according to the same authority was a prince called Chūta-Pallava, who is very often taken to be a historical person. However, Chūta-Pallava is not a historical person. He is the eponymous ancestor of the Pallava family, symbolizing in himself the union of the Cuṭu and the Pallava families. He is a myth, and we have to deal with him in that capacity. His name or the names of his equally mythical predecessors are not mentioned in any early inscription either of the Prākṛit or of the Sānskṛit period. We must separate history from mythology; and it is only then that we will be able to see light.

We shall now proceed to show that the interval between the Prākṛit and the Sānskṛit periods, if at all it existed, is not a long one of two centuries, but a short one of two generations. We have shown above that it is not possible to identify Vīravarman with Vīrakūrcha. The only Vīrakūrcha known to the inscriptions is a very early king, the father of Śivaskandavarman of the Hirahaḍagaḷḷi plates. If this be admitted, the donor of the Darśi plate must be a grandson of Śivaskandavarman or some one who stood to him in that relation. The period of Sānskṛit charters began two generations later than that of Śivaskandavarman. And it is impossible that these two generations could have extended over a period of nearly two centuries.

This view is supported by the evidence of inscriptions. In fact, the Prākṛit inscriptions may be said to belong to the earliest phase of the Sānskṛit period. We find in them words, sentences, and whole passages in good classical Sānskṛit. We have, for example, in the Hirahaḍagaḷḷi plates, which Mr. Venkayya assigns to the beginning of the fourth century, a complete sentence in Sānskṛit.

Svasti gōbrāhmaṇa lēkhaka vāchaka Śrōtṛibhya iti

The alphabet of the Kōṇḍamūḍi grant of the Bṛihatphalāyana King Jayavarman is said to resemble closely that of Mayidavōlu plates of Śivaskandavarman.

[1] S. I. I. Vol. II, Part V.

It contains two Sānskṛit words *mahèśvara* and *bṛihatphalāyana* besides the legend, *bṛihatphalāyana Sagōtrasya mahārāja Śrī Jayavarmaṇaḥ* which is in good Sānskṛit. The British Museum plates of Chārudēvi [1] whose characters are said to 'resemble those of Hirahaḍagaḷḷi plates of Śivaskandavarman,' contain the usual imprecatory verses which frequently occur in the Sānskṛit inscriptions.

Bahubhirvvasudhâ dâttâ bahubhiśchânupâlitâ
yasya yasya yadâ bhūmiḥ tasya tasya tadâ phalaṁ
Svadattāṁ paradattāṁ vâ yôharêta vasundharāṁ
Gāvaṁ śata sahasrasya hantuḥ pibati kilbishaṁ.

Another Prākṛit inscription also contains a Sānskṛit passage consisting of two imprecatory verses *Shashtiṁ varsh sahasrāṇi* and *Bahubhirvvasudhâ dattâ.* The donor of this grant is Vijaya-Dēvavarman of the Śalankāyana gōtra, and it appears to belong to the same age as the British Museum plates. In this connection, the following remarks of Dr. Hultzsch are very instructive. 'While in the cave inscriptions, every double consonant is expressed by a single letter, the orthography of the prose part of the subjoined plates agrees in this respect with that of the literary Prākṛit and of the British Museum plates of Chārudēvi.' (E.I. IX. 57.)

It is clear from these that the Pallava and the Bṛihatphalāyana Prākṛit inscriptions belong to a period of transition. The Sānskṛit passages in the Prākṛit inscriptions are the significant symptoms of the fast approaching Sānskṛit period. In the first two cases, there are only words and sentences in Sānskṛit; but in the last, we have whole passages; and this change takes place within a single generation. We can also illustrate another stage in the rapid displacement of the Prākṛit by the Sānskṛit as the language of the inscriptions. The evidence is supplied to us by the copper-plate grant of Dāmōdaravarman of Ānanda gōtra[2]. Regarding the date of the grant, the government epigraphist offers the following remarks. 'It could not be very far away in point of time from the Prākṛit plates of the early Pallava kings of the third and the fourth centuries of the Christian era.'[3] The language of the charter is Sānskṛit; but it contains a Prākṛit passage. 'Three groups of Brāhmaṇa donees with their respective gōtras are mentioned, viz., 11 of the Kondinna (i. e. Kaundinya) (gōtra); 5 of Kassava (i. e. Kāśypa) (gōtra); 1 of Vatsa gōtra, and 1 of Āgasti (i. e. Agastya) (gōtra). As in the case of the gōtras, the names of the donees also are given in their Prākṛit forms, e. g. Ruddajja (Rudrārya), Khandajja (Skandārya), Aggijja (Agnyārya), Savarajja (Śabarârya), and Bhaddajja (Bhadrârya)'. In this inscription, we are able to discern the last traces of Prākṛit which is rapidly ceasing to be the language of the inscriptions. This process of Sānskṛitization seems to have been complete within a little more than a generation.

The early Kadamba inscriptions also reveal the same fact. The earliest of them is the Malavalli Pillar inscription.[4] Dr. Venkatasubbayya (late of the Mysore Archæological Department) who has closely studied this inscription, arrives at the conclusion that Śivaskandavarman mentioned in the inscription 'was not a Kadamba king' and therefore his' 'name should be deleted from the list of

[1] E. I.VIII, 143. [2] *Madras Rep. Ep.* 1920-21. [3] Ibid.
[4] E. C. VIII., *Shikarpur Tq.*, p. 264.

the Kadamba kings.'[1] The result of his discussion is that we are left in the dark regarding the name of the donor of this grant. Taking advantage of his discussion, M. Dubreuil attempts to attribute it to Mayūravarman himself.[2] There are, of course, a few points which favour this attempt. The language of the inscription is Prākṛit which is a sure indication of its early date. Moreover, the alphabet of the inscription resembles so closely that of the Prākṛit Cuṭu inscription on the same pillar that it induces Dr. Rapson to think 'that the kingdom of Banavāsi had passed from the Cuṭu family into the hands of the Kadambas.'[3] That Dr. Rapson is wrong is proved by the Talagunda inscription of Kakusthavarman,[4] who says that his great grandfather obtained the territory as a military fief from the Pallava lords of Kānchī. Therefore, the two inscriptions are not so near each other in point of time as Dr. Rapson supposes them to be. Be that as it may.

It is not probable that Mayūravarman could have been the donor of the Malavalli inscription. The contents of the Prākṛit verse contained in the inscription go against the view.

Uktām Khandhō :

'*Viśvakammā bahmadejjaṁ sē Kadambēsu ṛidhmatē,*

Visasattu chātuvejjaṁ siddhita nigama viditaṁ cham.'

Dr. Venkatasubbayya comments on this verse as follows:

'This stanza being a quotation must have been composed before the time of the inscription. It is, therefore, not unlikely that the Kadambas had acquired a renown for giving *brahmadêyāni* long before the time of the inscription.'[5]

If 'the Kadambas had acquired a renown . . . . long before the time of the inscription,' Mayūravarman, the founder of the dynasty could not have been the donor of the inscription. The donor must be some one of his successors. The last two sentences are almost in Sānskṛit '*Jayati lōkanāthō nandanti. Gobbamhaṇa Siddhirastu Śrīrastu.*' These indicate that this inscription like the early Pallava and Bṛihatphalāyana Prākṛit grants, belongs to the period of transition. Here also the Sānskṛit period sets in within a short time. The inscriptions of Kakustha, the great grandson of Mayūravarman are in Sānskṛit. His Halsi plates which are dated in the eightieth year of an unnamed era are in Sānskṛit. This era is generally supposed to be the one which Mayūravarman started when he was crowned the king of the Kadambas. Therefore, there could not have been an interval of more than thirty or forty years between the Malavalli Prakṛit inscription and the Halsi plates.

The foregoing discussion makes it clear that the Prākṛit and Sānskṛit periods followed each other very closely. The interval between the two periods is so short that Sānskṛit displaced Prākṛit within a short time at the most of two generations. Although the unnamed donor of the Darśi plate lived in the Sānskṛit period, his great grandfather Vīrakōrchavarman could very well have lived in the Prākṛit period. There seems to be no doubt that Virakōrchavarman was the father of Śivaskandavarman of Hirahaḍagaḷḷi plates, and can safely be identified with 'Mahārāja Bappasāmi' mentioned therein.

[1] I. A. XLVI., p. 154. [2] *The Ancient History of the Deccan*, p. 99.
[3] *The Catalogue of Indian Coins : Introduction*, p. 54. [4] E. I. VIII., p 24.
[5] I. A. XLVI., p. 154.

MADRAS N. VENKATARAMANAYYA.

The Aryan Tholos of Malabar

(Translation from the French of Prof. Jouveau-Dubreuil in the

Journal of the Royal Asiatic Society.)

The Malabar Coast being in direct communication with the Indus Delta there is nothing strange in finding there rather than elsewhere monuments analogous to those of Mesopotamia and in Europe. As a matter of fact we find here tholoi quite analogous to those in the Mediterranean basin. In my book *Vedic Antiquities,* I drew attention to the existence of these hemispherical tombs giving out as my opinion that these tombs were Aryan. It is important to note this detail that these hemispherical tombs have facades ornamented in a fashion quite identical with those of the Greek and Phoenician tholoi. I request the reader to consult the work *Histoire de Art*, by Perrot and Chipiez (tom. III) and to observe the figure 158, p. 221 and the figures 162 and 163, p. 226 (Tomb. in Malta). Now let the reader turn his eyes to the photograph (plate 14 fig. 1 in J.R.A.S. October 1926, p 716) which represents an Aryan tomb at Pounnol close to Tallai between Tellicheri and Māhi. The style of the doorway is extremely characteristic: it is in the style of the Mediterranean tholoi and particularly of the Phoenician tombs. The tomb of Malabar (above referred to) is however a 'tomb with cupola' a tholos. Some tombs are double. (Plate 14, fig. 1.) But the common facade is always ornamented in this very characteristic fashion. (Plate 14, fig. 2.) represents the doorway of one of the cells of the groups of Padinyakumari tombs. (See Vedic Antiquities, p. 17.) This style seems to me to be of Sumerian origin, because this decoration is very frequent in the monuments of Mesopotamia. Plate 15, fig. 2. represents the interior of the same tomb. This cave, divided into sections shows the circular form of the vault and in the interior the stone table upon which were deposited the remains of the Aryan chief. The discovery of the facades in the Sumerian style in Malabar is of very considerable interest. In my opinion these tholoi of India date nearly a thousand years before our era and are almost contemporaneous with the Phoenician tholoi.

MADRAS — R. GOPALAN.

Editorial Notes

Education and Personality

One of the most significant trends in modern education is the recognition of the primary importance of the person. It represents a reaction against an emphasis that has long been too great on the institutional side of education. In the elementary stage of education particularly the class was made the centre, the unit, the criterion of worth and progress. To be sure, the teaching of pupils in classes has an economic value that can never be neglected. But we are beginning to realize that the class is not an end in itself, and never can be. So long as it serves the ends of educating persons the class is an excellent servant and instrument, but when it becomes the master and the pupil the instrument, the true end of education is not attained. Keeping pupils in classes and demanding that they should be allowed to make progress at equal rates of speed, barring of course failures in examination tests, presupposes a uniformity of human nature and ability that is a fiction. As Samuel Butler said,

> 'When they're cast into a lump,
> Their talents equally must jump.'

But the hard facts of experience show that they do not. The result is that many teachers are realizing, as perhaps never before, the limitations of the class as a medium of instruction, and are insisting on increasing facilities that will enable them to give attention to individual differences. Sir John Adams has suggested, 'The wish being the father to the thought, there is a rumour that the knell of class-teaching has been rung.' But as he adds, the death even if inevitable, will be a lingering one, and there is plenty of time yet to arrange for the funeral ceremonies.

In the Presidency of Madras the patient is not even in a bad way. The stress of institutional education is very marked. Not only is the class room regarded as the foremost medium and for many the only medium of instruction, but the examination the only method of testing the progress of the pupil or student, and the text-book or lecture-notes the only method of preparation for that ordeal. The entire aim of students is the securing of a seal of approval from the University of the Government in the form of a degree or a certificate. In too many cases the passing of a standard examination to enable the subject to secure employment that demands such a standard is made paramount to all else. There is no need to enlarge on a fact that is so readily conceded and so universally deplored. Very often students themselves are the first to acknowledge and condemn the practice, but they feel that they are the victims of a system. Government posts, professional openings and commercial pursuits are so many of them made subservient to the system that the individual can see no other way to avoid starvation than to attain the sanctioned

external standard. Once having submitted to the inevitable, he soon goes the rest of the way in submission by following the methods that he finds in vogue in many institutions and among the mass of his fellow-students.

What are we doing to help students to realize the real purpose and meaning of education? It can scarcely be repeated too frequently and too vehemently that the aim of education is the unfolding of personality. The task of the College or the school is not the injection of so much knowledge stuff into mind receptacles, so that they may be able to reproduce it on appropriate occasions. It is rather the provision of a congenial atmosphere in which personality may develop up to its maximum capacity. The measure of the success attained is not in numbers or percentages of those who pass examinations, but in its contribution to unfolding character. It is not in terms of what it is able to put into persons, but what it is able to get out of them. Its goal is thus the self-conscious individual, who is self-determining and self-directing, and who for himself has chosen to be moral and social. Education is a suggestive rather than a coercive process. Personality is nurtured, not compelled. The college should train persons who shall be characterized by poise of judgement, equanimity of feeling, and reasonableness of action. A certain amount of organization within education is desirable for efficiency and economy. The tendency to be avoided is that of fitting persons into systems like the business-man arranges his documents in pigeon-holes. We must not forget that the end of the process is persons who of their own accord do the right thing in the right place, and at the right time.

This is what is meant by democracy in education. It is the translation into educational language of Abraham Lincoln's political legend, 'Government of the people, by the people, for the people;' and of Jesus' religious teaching, 'The sabbath was made for man, and not man for the sabbath.' One thing that a college or school ought to do, whatever else it may leave undone, is to help the youth to control himself, and to direct his energies to worthy ends. The world is weary of demogogues who are trying to capture popularity and authority, but who have not learnt the lesson of self-control. No man will ever be a leader and a master of men for very long who has not attained the art of self-mastery. Let no one delude us by telling us that in business and political life personal character does not matter. Be assured that nothing else matters.

Modern education is laying great stress on freedom. Now of course absolute freedom is a fiction of the imagination. Every one of us is limited by physical and social conditions. One thing that some teachers, as some political enthusiasts are in danger of forgetting is that freedom has to be achieved in an environment of other free people. I have no right to a freedom that endangers or restricts the freedom of other people. There is no atmosphere in which that lesson can be more effectually taught and learned than the college or school. Here again, let us always keep sight of the end. Even freedom, desirable as it may be, is not an end in itself. It is a means and an indispensable means to the unfolding of personality. If the youth learns the lesson of social and relative freedom in the wholesome atmosphere of the college, he will not easily forget it in after days.

It will save him from the perilous doctrine that liberty means license. Why should we want freedom? Because the development of personality demands it. Huxley once remarked that the only freedom about which he cared was the freedom to do right, and that he was perfectly willing to give up his freedom to do wrong. 'I protest,' he said, 'that if some great Power would agree to make me always think what is true and do what is right, on condition of being turned into a sort of clock and wound up every morning before I get out of bed, I should instantly close with the offer.' Some people thus glibly talk, but it is doubtful if they would really agree if such an offer were before them, for it would mean the giving up of personality, the one thing most worth while. We must have freedom of choice if personality is to develop, even though we choose the wrong sometimes. The purpose of education is to help enable the person to make right choices, to use his freedom wisely in the interests of larger and richer life.

The future security of democracy lies with the school and the college. If the youth of a country learn the lessons of freedom, discretion, and the imperishable worth of personality, they will never forget them. If they learn that the core of education is personality, they will demand that the heart of business and the soul of politics shall also be personality. The only wrongs that exist are sins against personality. Every triumph of social justice and righteousness is a triumph for personality. Instil these ideas into the youth of to-day, and you are assured of their due recognition by the leaders of to-morrow. The democratic spirit is an ideal of brotherhood and service, a recognition of the business of living as a great comradeship. Certainly there is no place where that truth can be more effectually taught than in the school. Nor should we think of the school merely as a training ground where such principles are inculcated. It is more than that. It is actually putting into practice these principles. The old idea that while we are at school and college we are learning to live, and that after we graduate we put into practice what we have learned is exploded. We are living now, every moment of the time, and the largeness and usefulness of our future living depends on the breadth and power with which we live in the present. It is true that at school and college we lay the foundations of our house of the future. But let us not forget that the foundation is a most vital part of the building.

The student would do well to ask himself repeatedly, 'Am I being educated?' It is not the question as to whether or not he is succeeding in stuffing his mind with scientific information, however useful that may be. But he needs to know whether he is steadily growing into a bigger and a better person. So too the University and the College does well to inquire periodically whether its work is as educative as it ought to be. If the stress is on texts, syllabuses, examinations and degrees, it is in the wrong place. We need to know that our students are growing into nobler and stronger men, whose purposes are worthy and whose lives are witnesses to controlling ideals that uplift and inspire.

The Proposed Tamil University

Within the past few weeks there have been published two volumes entitled 'Report of the Tamil University Committee. Evidence—Parts I and II.' We

are glad to see these evidences of life, for we had almost begun to forget that there was such a body as the Tamil University Committee. Two years have passed since it was appointed by the Government. Its work was to consider the advisability of establishing a university in the Tamil districts of this presidency, the nature of the university to be established, the source of its funds, the question of its jurisdiction, aims and features. A questionnaire was prepared by the Committee, and the first of the volumes now before us contains the answers which have been received to these questions. One hundred and eighteen replies are given, and these represent the opinions of individuals and of bodies. So that the opinion expressed covers a wide field, wider than the mention of a hundred replies would lead one at first sight to think. Principals of colleges voice the thoughts of their staffs, and the ideas of many are contained in the resolution of a single local body. The second volume gives us the oral evidence of over fifty witnesses. When both volumes are looked at it is impossible to resist the impression that here, if anywhere, is to be found the grounds on which the proposal for the establishment of a university in the Tamil districts will be upheld or will be upset. We can hardly expect such a body of evidence to be again collected. It comes from all sorts and conditions of men and women—philanthropists, educationists, members of the local legislature, zemindars, journalists, lawyers, representatives of local self-government, and public-spirited citizens. It may be of interest to our readers to note that side by side with the memorandum of the principal and three professors of this College is that of a post-graduate student residing in College Park Hostel, while the long memorandum of the Madras Teachers' Guild was prepared by one of our Senior Lecturers. These three statements, it may be said, were sent in independently. We notice that they all favour the idea of a new university. So much for the mass of evidence. If there are interests which have submitted no opinion for consideration, the want of this cannot be laid at the doors of the Committee. That body could not have done more than it has done to obtain and record what the residents of the Tamil districts are thinking about the establishment of a university within their districts.

Out of such a mass of opinion is it possible to discover any outstanding principles? One thing is clear, namely, that not a few hang back from the idea of new university because they do not see how it is to be adequately financed. On grounds of educational facility they favour a new university. This is the position taken up by a far wider circle than the witnesses whose evidence is given in these two volumes. But if the educational needs of the presidency require the facilities which another university will provide, there can be no doubt of it that the supply of these needs is of paramount importance. Something effective must be done to satisfy them. If the university is of the right kind, we may be sure that funds will be forthcoming. And that is the position which the majority of witnesses take up. They do not see how these needs are to be met by the University of Madras. More is needed than it can supply. A separate university is required. This position is re-enforced when the position occupied by the University of Madras is further considered. At present it combines the functions

of a local university and those of an affiliating university. Its main object under the 1923 Act is to develop the former of these functions; those of affiliation are merely temporary. And it is well that this should be recognized. For there is a limit to the work which an affiliating university can do. Not only has the Report of the Calcutta University Commission taught us that; it has been brought home to the universities of India with greater or less force during the past fifteen years. And the realization of this truth has led to the establishment of one university after another. Affiliation is a most useful method, provided the area over which it extends is not too great. Beyond a certain point the power of the university to discharge its affiliating functions begins to diminish, and the whole machinery of the university is affected thereby. A larger burden is being placed on the back of the University of Madras than it can bear. To develop its activities within the ten mile radius is an ever-increasing task, making heavy demands upon it. There are signs that it is finding it hard to do this and at the same time to do justice to the affiliated colleges. The University of Madras will require to be relieved of these affiliating functions as quickly as possible if the affiliated colleges are to receive the development which they may reasonably expect. In their interests the establishment of a new university is to be welcomed.

Another fact which the evidence brings out is that there is a considerable body of opinion in favour of the new university being of the federal type. A number of witnesses think that to create a university which will be a replica of Madras is not the best method of supplying the higher educational needs of the Tamil districts. There is much to be said for this view. It would be unfortunate if colleges could spring up at any place within the jurisdiction of the university. It is true that there is a great advantage in having a college within easy reach, but only if it is a properly staffed and equipped college. If it is not, then there is no advantage in its nearness to a body of students. No father or son really wishes for the proximity of a second-rate college. But the equipment of a college nowadays is an expensive affair. There are few managements which are able to make the provision for staff and courses which they consider to be really satisfactory. But if a number of colleges exist in one centre many of these difficulties will be solved. Common laboratories and libraries will be possible, and systems of inter-collegiate lectures may be arranged with comparative ease. In this way students will have at their disposal facilities that are both numerous and of a high order. Concentration at specified centres is much to be desired. One or two such centres suggest themselves at once to those who think over educational conditions in South India. We think that the number should not be large. Some half dozen of these centres, each under the governance of the new university, and each having a certain amount of autonomy, will prove a real boon to the Tamil districts. And there is a further feature which is bound to mark the new university. There are centres at which certain studies will naturally group themselves. There are places where, in the very nature of things, emphasis will be assigned to technical studies, or medical studies, or scientific studies, or Dravidian studies. This will be a natural development and it

will be as healthy as it will be economical. At these centres it may be that we shall have nuclei of fresh local universities. Until they were able to stand on their own legs they would have a federal government, uniting them together but allowing of much independent growth. Such are some of the thoughts which the reading of the proceedings of the Committee suggests. We look forward with interest to the publication of the Committee's Report.

The Age of Consent

Sir Hari Singh Gour deserves the sympathetic support of all who are interested in progress and social justice for the manner in which he persists in pressing for reform with respect to the age of consent. The Act of 1925 provides for the punishment of those who cohabit with married girls below the age of thirteen, and unmarried girls under fourteen. Sir Hari Singh Gour's present proposition is to advance the ages to fourteen for married girls and sixteen for unmarried girls. The Bill which he has introduced into the Assembly is intended to prevent the marriages of boys and girls below the ages of eighteen and fourteen respectively. It is rather depressing to find that the Brahmana Mahasabha of Madras should go on record as opposed to the bill, and should memorialize the Viceroy 'to take all necessary steps for preventing the passing into law of the obnoxious Bill.' There are many enlightened and educated Hindus who regard the cry that religion is in danger as a perversion of the facts, and who can see nothing but a regressive influence on a religion which supports child marriages. Many of them have already protested against the assured right of the Brahmana Mahasabha to speak for all Hindus.

What do the women themselves think of the matter? Are they content to leave matters alone as they now stand? It is interesting and encouraging to find the All-India Women's Educational Conference which met in Delhi in February demanding that the legal age for marriage of boys and girls must be raised to twenty-one and sixteen respectively, which is an even more radical change than Sir Hari Singh Gour proposes. While many deplore the too negative conclusions of Miss Mayo's *Mother India*, it is apparent that it is having some influence in arousing the public conscience in regard to the need for redress from this evil. The Hon. Mr. Natarajan, Editor of *The Indian Social Reformer* and many others associated with him have been doing valiant service for this cause for many years. The hope for a permanent remedy lies in an enlightened conscience which will not only demand the raising of the age of consent, but the raising of the legal age of marriages. This we hold in the name of humanity and for the sake of social righteousness and well-being. Any institution that robs childhood of its charm and freedom, and places the burdens of the family on shoulders too young is a barrier to progress, whether it be in India or any other land. The social reformer may meet with discouragements in the present; but he holds the key to the future.

What Men Think

BROTHERHOOD

We are all brothers between the Four Seas.'—*Confucius*

The One bethought Him to make man
  Of many-coloured dust,
And mixed the holy spirit in
  In portions right and just;
Each had a part of mind and heart
  From One Himself in trust.

Thus came the brown and yellow men
  And black and white and red,
So different in their outer look,
  Alike in heart and head,
The self-same earth before their birth,
  The self-same dust when dead.

This remarkable poem, by Pai Ta-shun, a Chinese poet, was translated by Dr. Frederick Paterson, in his collection of Chinese lyrics.

A Definition to the Kingdom of Christ

There have been many attempts in the past to describe the kingdom of God. Many have thought that it was one of those phrases which defy logical definition. But recently necessity has arisen for an accurate definition from the point of view of law. A good woman in New York died, and among the bequests which were found in her will one of them was a sum of about $5,000 to be distributed according to the best judgement of the executors where they considered it would be 'most effective in the advancement of Christ's kingdom on earth.' The interpretation of the will fell to Mr. Justice Pounds of the Court of Appeals, and in writing his opinion he gave an illuminating exposition of the principle of the law which holds that bequests of this type should not be construed in a spirit of antagonism, disappointing the general intention of the will. Justice Pounds contended that, although figurative language is employed, the 'general purpose and meaning' is not difficult to ascertain, if the document be 'read with the aid of our common knowledge of the spirit of the devout.' The decision then proceeds to elaborate this definition.

'Christ's Kingdom on earth is the community of the whole body of Christ's faithful people collectively; all of whom are spiritually united to Christ as the head of the Church, without regard to differences of creed and doctrine. Its cause is advanced in divers manners, conspicuously through the work of religious

associations and educational and charitable institutions of a religious character. Such work is in its nature charitable and uncommercial. It is identified not only with the dissemination of Christian doctrine but also with the teaching of the young and the care of the sick under Church auspices. Charity and education have thus ever been the handmaids of religion.'

The judge's decision then proceeds to interpret the meaning of the bequest in terms of evangelical Christianity which the judge evidently knew was the intention of the testate. The bequest he held to be intended to aid general Christian activities, 'to carry Christ's message throughout the world; to care for the sick and to bring up the young under religious teaching; to promote the principles and practise of the Christian religion.' He further held that the expressed purpose of the will was 'to promote the cause of the Christian religion in the most general sense,' and he decreed that the court must so rule as to give effect to that intention. The interpretation of the judge was, we must admit, remarkably clear—more so than some that have emanated from the theologians.

The Relation between Science and Philosophy in present-day thought

In a recent lecture, Prof. John S. Mackenzie indicates the trend of thought in our own day regarding the relation between science and philosophy. He points out that while in the nineteenth century, there was often very marked opposition between science and philosophy, that opposition is becoming less and less to-day. The opposition was due to the fact that science tended in the last century to attempt to explain everything in terms of categories borrowed from the mechanical or non-human world, while philosophy tended to be *a priori* or speculative in the bad sense, i.e. to deal with general conceptions without much reference to facts. But Prof. Mackenzie urges that as Prof. Muirhead has recently pointed out, the first quarter of the present century has brought about a sort of *entente* between the special sciences and philosophy. Both science and philosophy are now learning to know their limitations, and this not through any extraneous influence but through developments within their own fields of investigation. The scientist has learnt to be humble and not to claim that the categories which he employs in his special science are to be applied *in extenso* to interpret the whole universe. As Caird remarks: 'It is the peculiar strength of the modern mind that it has reached a clear perception of the finite world as finite; that in science it is positive—i.e., that it takes particular facts for no more than they are; and that in practice it is unembarrassed by superstition—i.e., by the tendency to treat particular things and persons as mysteriously sacred.' By thus confining itself to its own special field, science leaves philosophy to speculations regarding the nature of the universe taken as a whole. Philosophy in its turn acknowledges that it cannot afford to neglect the facts which science puts before it. In this manner good feeling has been established between the two fields of thought. But it may be asked what is the reason for this change of attitude?

The change of attitude in science seems to have come about owing to the discovery made by scientists themselves that some of the categories employed by them

can no more be employed without qualification, while others cannot be employed at all. The first enthusiasm which tended to lead scientists to regard their principles as absolute and as having universal sway has accordingly given place to greater sobriety and caution. Take for example the change in the conception of the atom made by recent discoveries and the new view regarding Space and Time made necessary by Einstein's researches. Prof. Mackenzie remarks: 'The analysis of the atom and Einstein's theory of Space and Time have greatly modified the scientific conception of the physical system. Even at a much earlier time, Hegel remarked that matter appeared to be 'becoming very thin.' It has grown much thinner now. The solid atom has now been resolved into electro-magnetic activities . . . . and the infinite Space, in which the atoms were supposed to move, is now regarded as a limited spatio-temporal system.' The solid atom in terms of which science thought once to construct a materialistic philosophy has thus vanished out of existence. Or take it on the more biological side. Here also somewhat similar modifications have been taking place. 'The human organism is no longer thought of, as it at one time tended to be, as an aggregate of separate nervous reactions of a somewhat mechanical kind, but rather as a unified system pervaded by an integrative activity. There has also been a similar transformation in the general conception of organic evolution. The 'survival of the fittest' is not now regarded as an adequate explanation of the evolutionary process. The pre-Darwinian theory of Lamarck has been, to some extent, taken into favour. It is realized that there is an upward urge in nature—often at least a partly conscious urge—is not now a view that can be lightly set aside.' From such developments within science itself, scientific thought is tending more and more to be doubtful of the possibility of explanations of a purely mechanical type, and therefore to be more and more open to the kind of explanations given by philosophy.

Philosophy in its turn has also undergone developments which admit of its meeting science half way. In its opposition to materialism, it does not any more run to the position characterized by Sidgwick as mentalism, in the view which reduces nature or the physical would purely to terms of mind, and asserts that nothing exists but minds and their manifestations. This was the position of Berkeley. But the development of philosophy since has been to give greater reality to nature than Berkeley in his revolt from materialism was willing to give it. The tendency in philosophy to-day is to be idealistic without being mentalistic, i.e. to regard spirit or mind as the principle in terms of which we are ultimately to understand the universe, without destroying at the same time the objective reality of physical nature or of regarding it as mere appearance or illusion. Accordingly the tendency in philosophy in our own day is to try and do justice both to physical as well as to spiritual phenomena, and only thus to achieve a final synthesis between them. On this account, philosophers to-day are apt to be more receptive to scientific truths regarding the physical universe than those of the previous century. In the work of ultimately reconciling the physical with the spiritual, philosophers find that it is not possible to neglect the

account which the sciences give of the physical universe. In this way, Prof. Mackenzie points out, a greater harmony has been achieved in our own day between science and philosophy than formerly. The ideals which the two branches of knowledge set themselves, and the principles which they employ are now coming to be regarded as supplementary rather than as opposed, to each other.

Antirachitic Vitamin D.

The vitamins are chemical compounds which, although occurring in plants and animals in very minute quantities, are essential for the assimilation of food. One of these substances, now called vitamin D, is necessary for the assimilation of calcium and phosphorus, and a deficiency of it results in such diseases as rickets and dental caries. It has been known for some years that butter contains this antirachitic vitamin, and that cod-liver oil is particularly rich in it and has been very successfully used in curing rickets. It has also been known for some time that sunlight and ultra-violet light have curative effects in this disease. Important discoveries have recently been made which show the connection between these two sets of observations, and which are likely to result in the elucidation of the chemical nature of vitamin D. It had been found that foodstuffs containing cholesterol developed antirachitic properties by exposure to ultra-violet light. A careful study of a number of bodies related to cholesterol has shown that the compound converted into the active agent is ergosterol. Crystals of ergosterol by mere exposure to sunlight or to the radiation from a mercury-vapour lamp become converted into a resinous substance which is found to contain vitamin D in a highly concentrated form. Pure cholesterol and the other related fatty compounds so far investigated, after complete purification from ergosterol, do not behave in a similar manner.

It appears probable that vitamin D originates in the animal body. The sebaceous glands produce sterols which by the action of sunlight give rise to the vitamin which, as has been known for some time, is stored in the liver. The reserve accumulated during the summer suffices under natural conditions for the maintenance of good health during the sunless winter months. The chief dietetic source of vitamin D is milk and butter. During the winter these products become progressively poorer and poorer in vitamin at the same time that, owing to the weakness of the sun's rays falling on the skin, the human body is producing very little. Hence, under the artificial conditions of modern life in the more sunless countries? vitamin D is a constituent that pre-eminently needs to be added to the diet at certain times of the year. This need has been recognized by English manufactures who are now producing insolated ergosterol and putting it on the market in the form of pellets and capsules and in combination with substances containing other vitamins.

Nebulium

Huggins about 60 years ago discovered that the Great Nebula in Orion and a number of other nebulae had spectra consisting of bright lines. This indicated

that these nebulae consist of glowing gases in a rarified condition. On comparing these lines with those in the spectra of elements occurring on the earth, it was found that many of them could be attributed to the light elements hydrogen, helium, carbon, nitrogen and oxygen. Several lines, however, corresponded with those of no known spectrum and it was assumed that they were due to a new element which was named 'nebulium.'

All the known elements occurring in nebulae are of very low atomic weight and the unknown lines are also those of light atoms. Recent work on the structure of the atom makes it almost certain that no new atoms of low atomic weight remain to be discovered. Modern photographic methods of observation have brought to light many more lines in the spectra of nebulae which are not found in any artificially producable spectrum. These lines have been shown to belong to at least four groups apparently unrelated to each other and therefore not from the same element. In the light of these two sets of facts, physicists have been doubtful of the reality of nebulium for some years and this doubt is now found to have been justified.

The work done in atomic physics during the past decade has shown that atoms are capable of existing in a certain number of 'energy states' but not in states intermediate between these. An atom after being excited loses energy in a series of jumps, passing with great rapidity successively from one energy state to another. In passing from each energy state to the next, the atom emits a definite quantum of energy in the form of light, the wave-length of the emitted light being determined by the quantum of energy. Hence, by a study of the line-spectra of elements it is possible to obtain information as to the energy states possible for their atoms. It is found that when an atom has lost almost all of its additional energy there are several metastable energy states in which it may remain for some time before it loses its last quanta and comes to the normal unexcited state. If while in one of these metastable states the atom collides with another, its remaining energy is dissipated mechanically by the impact. In a gas at ordinary pressures each molecule collides with others some thousands of millions of times a second, and even in vacuum tubes, such as are used in producing spectra in the laboratory, there are several millions of impacts per second for each molecule. Under these conditions the internal energy of the atoms in the metastable condition is dissipated mechanically and no light is given out. In nebulae, however, the vapour is so highly rarified that on the average impacts between molecules take place only at intervals of minutes or hours and the metastable atoms have time to unload their energy in the form of radiation. The spectra of nebulae thus contain lines that it is not at present possible to reproduce in the laboratory, but sufficient data has been collected to make it possible to calculate the wave-lengths of such lines for some of the elements. Most of the lines attributed to nebulium are in this way found to be new nitrogen and oxygen lines. It is to be expected that the few other unknown lines will be found to belong to other known elements. Much of the work leading to these results has been done by Dr. Bowen at the Pasadena Institute of Technology, California.

A Mechanical Mind

A remarkable development in the sphere of electrical engineering is a machine recently completed by the professors of that department in the Massachusetts Institute of Technology the machine is called the 'product integraph' and is so designed that it will automatically solve problems which are too intricate for the human mind to calculate, and of course being mechanical the efficiency and accuracy of the results are assured. The following description is taken from the press bulletin issued by the Institute:

The new machine, which is called the 'product integraph,' opens the doors to important fields of research hitherto inaccessible. It was developed by Dr. Vannevar Bush, Professor of Electric Power Transmission, and a staff of research workers, including F. G. Kear, H. L. Hazen, H. R. Stewart, and F. D. Gage. The work was begun several years ago with the object of meeting the urgent need for a machine which would automatically solve problems of advanced electrical theory rapidly and with a high degree of accuracy. A technical description of the instrument is to be published by the Franklin Institute.

The product integraph, Dr. Bush explained, 'might be called an adding-machine carried to an extreme in its design. Where workers in the business world are ordinarily satisfied with addition, subtraction, multiplication, and division of numbers, the engineer deals with curves and graphs which represent for him the past, present, and future of the things in which he deals.'

The integraph, a device of electrical measurements, gears, and recording tables, is virtually a man-made brain which transcends human reasoning and readily plots the answer to problems that can not now be solved by formal mathematics. It requires from eight minutes to a few hours to make computations which would take an engineer from a month to a year to work out by ordinary methods.

The foundation of the integraph is a watt-hour meter of the same type as that used in every one's home for recording the amount of power used during the month. This machine adds up the power which is used from time to time and records the sum on its dials. It does this by running as a motor.

Integration is merely a mathematical way of expressing the sum of a series of numbers which vary according to a given rule. The mathematician, in using the integraph, takes an algebraic equation and plots it on a sheet of paper. These sheets are then passed slowly under pointers, and operators stationed along the length of the machine keep the pointers on the curves. As these pointers move up and down, the power flowing through the meter varies in proportion, and the number of revolutions it makes during the operation is the integral or sum which is desired.

Instead of moving hands over a dial, the meter controls a motor through a relay, and the motor is made to drive a pencil on another sheet of paper also moving slowly along. The result of all this is to trace on the sheet a curve which expresses the result sought.

The machine does not stop at this, however, but by a second integrating device, somewhat different than the first, but performing the same operation, integrates the result a second time. This makes the machine even more valuable, since many electrical equations that require but two integrations can thus be handled directly.

Another device is a system of back coupling whereby the curves which must be followed by the pointers depend upon the final result itself. This is accomplished by driving the tables upon which the plotted curves are fastened, by means of the same motor which drives the recording pencil.

The machine will solve practically any second order differential equation, which is a type of equation with which engineers have a great deal to do. Many of these equations can be formally solved only after long computation extending over months, whereas this machine accomplishes the same results in, at most, an afternoon.

Book Reviews

A History of India. By C. S. Srinivasachari, M.A. and M. S. Ramaswami Aiyangar, M.A. Part I. Hindu India, Pp. xii. and 260 with maps. Madras: Srinivasa Varadachari and Co., 1927. Rs 2–8.

The volume under review presents a narrative of the history of India down to the beginning of the Muhammadan era. It is designed to meet the requirements of senior High School and Intermediate students, and ought to meet a real need for students of these grades. With so many kings and kingdoms, many of them short lived and soon displaced by stronger arms, it is impossible to avoid a good deal of detail. We have wondered whether there is too much detail for students of High School age, and yet we would find it difficult to suggest how it could be obviated. No one can understand historical currents without a knowledge of the social background in which political movements take place, and our authors have done well to describe wherever possible the cultural, economic and religious movements that are so closely related to the political life.

We are particularly indebted to them for giving a more equitable proportion of space to South India than some historians have done. Much work is being done and requires to be done on the part played by Dravidian culture in the life of India. The present volume gives a fair recognition of the contributions that have been made to our knowledge of that important phase of influence. In this as in the earlier parts of the work there is a recognition also of the fact that opinions differ on many interesting points, due to the sparcity of accurate records. It is a valuable feature of the present work that the authors inform their readers on most of the noteworthy points where scholars hold different views.

There is one disappointment that the reader experiences, and that is with regard to the printing. A number of printer's errors have not been corrected, but that is not the worst feature. There is a good deal of carelessness in introducing letters of the wrong font, and innumerable broken letters occcur. A good book like this deserves better treatment at the hands of the printer.

Thanksgiving: The Key to Prayer. By Malcolm Spencer, M.A. London: Student Christian Movement, 1927. Pp. 75. *1s. 6d.*

The problem of prayer is one that troubles many earnest minds to-day. People are asking all sorts of questions about it. Is it merely a sort of spiritual gymnastic, good for the man who exercises but accomplishing nothing objectively? Is it a form of auto-suggestion? Is it merely the expression of an inferiority complex? What is accomplished by it? The present little book is not an attempt to deal with it from the point of view of the student of Philosophy of Religion, but rather from the practical view point of the religious man. And the title indicates its approach. The central function of prayer is not to get things done, but to attune one's heart to God which can best be done by thanksgiving for the benefits received and values enjoyed. If this be the spirit in which one prays,

much that is unworthy will be eliminated, and life will become more warm and true. We commend the book to thoughtful Christian students.

Gairvanee Darpanam. By T. R. Narayana Iyer, Vidvan. Trichur: V. Sundra Iyer and Sons, 1928. As 8.

This text book is well-planned. It introduces the child gradually and imperceptibly to the difficulties of Sanskrit. The stories are such as are familiar and highly interesting to children, and every lesson has its moral to teach. There are a number of poems which by their simplicity would certainly appeal to the child.

The Story of Serampore and its College is a little book of one hundred and sixteen pages including appendices. It is a revision of an earlier issue prepared by Rev. Dr. Howells the Principal, with some assistance from professors of Serampore College. One reads therein of the pioneers of Christianity and modern Indian civilization, Carey, Marshman and Ward, and of some of their marvellous achievements, in the face of much opposition, from America, England and in India itself. The beginners of the enterprise at Serampore have had worthy successors to carry on, and one can but feel that the story is packed with concentrated interest well worth consideration. The book is nicely illustrated, and sells for the modest sum of two rupees.

Christ's Way and Ours. By L. P. Larsen Association Press.

This little book has the qualities we expect to find in Dr. Larsen's work. It has that intellectual clarity and spiritual richness which so many in India and elsewhere have now come gratefully and affectionately to associate with his name. It is arranged as a series of Bible studies for daily reading. Taken as such, it will be found a real spiritual tonic. It is to be hoped that the publishers will be called upon for a second edition. If so, perhaps, they will improve the format, which is unworthy of themselves and of the book.

Students' Section

On the Backwaters of Travancore

I

It was on a hot blazing July afternoon that we took boat from Cochin and glided southwards. The cruel cutting rays of the sun, which a minute ago had so mercilessly transformed the narrow sandy streets of the city into one devouring furnace were now dancing on the gentle ripples of the lake. As we moved on, the hot unwelcome west-wind which was wearily blowing from the land and seemed suffused with the very element of burning fire changed into a bracing, stimulating breeze. Thus fanned by a steady breeze which ever and anon sent a quiver tingling through the veins under a beautiful blue sky, with patches of detached silvery clouds that frilled the far-off dim horizon, we floated gently along and saw the tops and turrets of a glimmering city slowly sink into the growing distance.

The narrow, fertile strip of land, entrenched behind the bastions of the Western Ghats, and comprising the States of Travancore and Cochin, has a beauty and history, all its own. These States form a rather secluded and isolated unit of the Indian Empire, but one nevertheless which retains its pristine beauty, undimmed through the ages. No other part of this glorious sunny land of ours, furnishes such delightful and varied scenes. That indefinable charm which haunts their towering hills, shrouded in perpetual grey, and converts them into a picture of a gigantic monster, a crouching elephant, or an eternal guardian to the innocent gaze of a little child ; that perennial beauty which permeates their sloping valleys and smiling plains, and invests them with the halo of sacred antiquity, the traveller may look in vain to discover in other parts and in other climes. But the one feature which more than anything else bewitches the eye and captivates the heart of a traveller is the charming lovely stretch of water which runs straight through the heart of the country, from one end to the other and makes of Travancore and Cochin 'a dream of music for the inward ear and of delight to the contemplative eye.' And as we proceeded on our journey, this growing conviction became eternally implanted in our bosom and sufficiently compensated for the occasional hardships that really heightened the zest of that memorable voyage.

The slanting rays of the evening sun shone full in our faces. Their rosy tint lit up our faces with a bright radiant hue. A strange unnatural calm rested on the waters. The prow of the boat cut clean across them, breaking them into gentle ripples in graceful undulation. The little waves moved onwards and outwards in an unbroken chain, till the farthest of them melted away into liquid water. As far as the eye could see the same clear crystal water lay before us and behind. On either side of us, an emerald green bordered the lake at the distance

of a few hundred yards. A wilderness of green tufted cocoanut palms luxuriated on either bank and interlaced their arms with the most imposing appearance of copious disorder. Their long oblique shadows lay picturesquely crowded on the quiet tranquil waters. Not a breath stirred them from their deep slumber, save the passage of the boat. Not a sound disturbed their singular silence save the gentle ripple of the water. The merry peals of laughter and the sparkle of spirited conversation, sent a harsh discordant note through the still air. The joy and the animation of life contrasted vividly with the solemn hush that had stealthily settled around us. Even in that hollow stillness, the sweet imperceptible hand of nature was at work and a divine effulgence pervaded the air. But few of us could see through or beyond the mystic veil that spread itself upon the unruffled waters and fewer still could hear through the awed silence and beneath the silent waters, the furious raging and boiling of a gathering storm. We moved on gay and cheerful as before, in happy, blissful ignorance.

But ere long we were disillusioned. The little patches which appeared like mere dots in vast limitless space, rapidly grew larger. Higher and higher they mounted, bigger and bigger they grew, till the smiling blue sky became dark and forbidding. One seething, struggling mass of dark hideous vapours quickly collected and painted the west with a sombre tint, while the angry rays of a banished sun filtered through the clouds and made them all the more ghastly. They spread a huge frowning shadow over the waters, that seemed to penetrate to the very bottom and cast a magic spell over the whole lake. A new destructive life was suddenly infused into the waters which showed evident signs of deep convulsive agitation, while the sky was getting more and more overcast. The very face of the earth was changed in the twinkling of an eye, and before the sweet vision of the shining sun and the crystal waters had scarce time enough to beat a hasty retreat, another and a more oppressive picture began to weigh down upon us. The instinctive thought that we were facing one of those terrible, capricious storms for which that part of the lake was so notorious, began to dawn upon us.

At this distance of time, as I reverse the handle of the camera and see the film reverse itself, revealing in vivid colours the experience of that particular afternoon, what impresses me most is not so much the precise extent of the risk and danger we were running as the fugitive moods and fancies that governed the mind in rapid and kaleidoscopic succession. The scene was so sudden and unexpected, and the prospect of a 'thorough good change' was so inviting that I confess to a momentary submission to the seduction of its romance. That love of adventure and novelty which I believe is innate in every youthful breast, I shared in common with the rest of humanity and strange though it may sound, I waited in eager expectancy for the storm to burst forth. I will never forget the subtle change which had crept over my mind, when an hour or two later the rain had ceased, the storm subsided, the sky had cleared, and the stars 'peeped through the blanket of the night.' From a fleeting love of adventure, my thoughts took shade as the storm increased with every passing minute, till the almost sure

certainty of death served like an effective tonic to settle them into a calm and collected resignation. Ah! what a resignation, what an incomprehensible, intangible moment! Life indeed is worth living, if now and again it can live through such 'incomprehensible, intangible moments.'

Meanwhile, the storm had burst with devastating fury. The waters rose in huge, thundering billows and curled up against the sides of the boat. A shrill, howling wind conveyed the peals of rumbling thunder to anxious and frightened ears. Every mouth was silenced and every sense strained to the utmost pitch of excitement. All on a sudden, a bright, lurid flash, quivered against a dark and dismal background. The signal was given, and forthwith the rain poured in gushing torrents. Never before had I witnessed such a fury of the elements. As the rain commenced, the waves rose to gigantic heights, hurling the boat up on their sturdy backs, and receiving it back in their deep-cut hollows. At times, a giant breaker would smash straight against its side, with such fury and force, that it was almost certain, that the boat could not withstand much longer such crushing weight. The triumphant crowns of silver spray which these enraged billows carried on their backs and which often flew through the air in chaotic confusion, washed clean into the boat, while the thick drops of rain were lashing straight across our face. It was a regular game of tossing up and down; the waves rose higher, and higher went the boat, the hollows became deeper, and lower it plunged; and every time we fancied that the next one would certainly bury us beneath it. But happily, that 'next one' never came.

Nearly an hour and a half had passed since the first surging wave beat against our side. The waters were settling down into a natural calm. The rain had ceased and the sky had cleared. No disfiguring clouds or hideous shapes marred its spotless beauty. With drenched clothes which clung to our bodies in a chilly embrace, we sat perfectly motionless. Escaping as we had, from the very jaws of death, it required some time, before we could arouse ourselves from that temporary stupor, induced by overstrained emotions. At last we regained self-possession and began to gaze around us with the most vacant eyes. Never before had the powerful charms of nature created such an indelible impression upon our minds.

M. P. Alexander.

Class III.

College Notes

Summer Holidays

THE COLLEGE WILL CLOSE FOR SUMMER VACATION on Friday, 30th March and will reopen on Monday, 25th June.

Sir R. Venkataratnam

AT THE FIRST CONVOCATION OF THE ANDHRA UNIVERSITY held in December the honorary degree of Doctor of Letters was conferred on Sir R. Venkataratnam Naidu whose photograph in academic robes we publish in this number. Sir Venkataratnam hardly needs any introduction to our readers. He is one of the most esteemed of our alumni. The Madras University under his direction is gradually emerging as a teaching University with more adequate emphasis on research. It is not easy in these days to divorce anything from politics or partisanship, and the Vice-Chancellor has been a great reconciling force in the administration of University affairs. The reformed University created several academic bodies which brought many young educationists from the districts, and the Vice-Chancellor has on occasions found it not a little difficult to control the enthusiasm of these young men. Sir Venkataratnam's term of office in Madras is shortly coming to an end, but we trust that his rich experience will continue to be at the disposal of his countrymen. Our congratulations to Sir Venkataratnam on the honour done to him by the University of the land of his birth.

College Day

THE COLLEGE DAY WAS CELEBRATED ON SATURDAY, 31ST DECEMBER. It was hoped that there would be a record attendance of old boys at the celebration in view of the several events during the Christmas week. But the anticipations of the College Day Committee were not fulfilled. Nevertheless there was a fairly large gathering, and as in the preceding year the whole of Saturday was devoted to the celebration. Beginning with *chota hazri* in the morning, three lectures were delivered between 8-30 and 10-30 a.m. Mr. S. Balasingam Satya Nadar read a paper on 'Moral and Religious Concepts in Codes of Law' which we publish as an article in this number. Mr. P. V. Rajamannar spoke on the 'Development of Telugu Drama' and Mr. A. S. Rajam spoke on the 'New Indian Women.'

Mr. Rajam said that the problem of new Indian women arose as the result of higher education among them. Educated Indian women had already begun to exercise a wholesome influence on the customs and manners of the people. Mr. Rajam thought that the time was coming when men would have to make room for women in avocations now monopolized by men. To obviate difficulties of employment Mr. Rajam suggested that Indian women should seek new avenues of occupation such as commerce, journalism, the stage, and the screen. The speaker thought that these suggestions implied the reorganization of society on a commonsense basis since sex obsessions were strongest where sex seclusion was most severe. Mr. Rajam advocated co-education of boys and girls and opportunities

for them to mix together in the playing fields, in debating societies, and at social functions. These would engender mutual respect and remove sex obsession. At the same time Indian women would grow more self-reliant, strong, and courageous.

The old boys then met in conference and the annual report was adopted. A new election of office bearers of the College Day Committee was held. Mr. Justice Venkatasubba Rao was elected President with Mr. A. S. Krishna Rao and Mr. O. Kandaswamy Chetty as Vice-Presidents. Messrs. S. Balasinga Satya Nadar and K. Sanjiva Kamath were elected Honorary Secretaries. The Committee was also reconstituted. After breakfast which was served in the High School Hall, the party was entertained to music. By 4 p.m. many old boys and guests arrived, and after tea in the College Hall, the assembly adjourned to Anderson Hall for the public meeting presided over by Mr. O. Kandaswamy Chetty.

Mr. S. Satyamurthi proposed Mr. O. Kandaswamy Chetty to the chair, and paid a high tribute to him as a valued friend and as his colleague in various activities. Mr. Satyamurthi added that whatever might be the political future of India, the future of the Madras Christian College was secure.

Mr. Kandaswamy Chetty then proposed the toast of the King Emperor which was honoured. In proposing the toast of the Madras Christian College Mr. Kandaswamy Chetty thanked the organizers for the honour done to him and said that his relations to the College dated as far back as 1881. He then briefly recapitulated the story of the beginnings of the College amidst an alien faith, its early struggles against caste and religious prejudices, how Dr. Miller arrived in 1862 on the scene and revived and rescued the College which was then a small school. Mr. Chettiar believed that the College had come into existence by a fiat of Providence, and was being directed by a divine hand. Dr. Miller was not merely a servant of the church, but a servant of God for establishing the kingdom of God on earth. The College had contributed much to the life and thought of South India. The history of the College was one series of adjustments to the changing environment. Dr. Miller was like a watchman in a tower, reading the signs of the times, and devising ways of meeting the needs of the situation. Referring to the conscience clause Mr. Chettiar thought that there were two ways of meeting the situation. The College might give the students the option to attend religious classes and receive grant from Government or insist on attendance at religious classes and give up government grants. Mr. Chettiar hoped that the College would be ready to forego government grants rather than give up its principle of imparting religious instruction. The people of South India expected the Christian College to give them the best of the West, divorced from all that was base and earthly. The object of the College was to establish the kingdom of God among the pupils that entered its portals without being swayed by considerations of caste, colour or creed.

Mr. Matthews in responding to the toast said that the present position of the College bore testimony to what was being done by them in this country. There

was no need for anybody to entertain any anxiety about the College. It continued to be as sound, as strong and effective as at any time in its history. It was true that some distinguished members of the staff had retired from the service of the College, but the College had been able to attract men of the very best qualifications imbued with high ideals, and they were carrying on the work with great devotion to the traditions of the College. He was not only referring to members recruited from overseas but to Indian members of the staff as well. He thanked the Government for their measure of support. The remarkable thing about the College was the good will of its old boys and the happy fellowship that existed between the teacher and the taught. He wanted to say a word about the future. It was borne in upon them more and more that their days in George Town were numbered. The conditions under which they lived there made it extremely difficult to do satisfactorily the work they had been doing. To realize to the fullest extent their aspirations they should secure a locality where a residential college might be established away from the noise and bustle of the city. The support of the government and of the public was essential for the fulfilment of the ambition, and he hoped that the generous minded public would come forward to their help. In 1937 it would be a hundred years since John Anderson opened his little school from which this College had sprung, and it would be in the fitness of things if they could celebrate their centenary by opening the new residential college.

Mr. A. S. Krishna Rao proposed the toast of the retired professors and said that if anything had contributed largely to the success of the College it was the disinterested work and personal worth of the retired professors. For more reasons than one their College must be given the foremost place in the Presidency as far as educational activities were concerned. This was the College that trained the best type of men in the Presidency. The retired professors were greatly responsible for moulding the character of students who were now occupying high positions in the state. The professors in this College were actuated by love of service to humanity and God, and he had no doubt that the College would continue to have a bright and prosperous future as in the past.

Mr. Sanjiva Kamath read the following letter from Dr. Moffat in reply to the toast:

ALWAYE, TRAVANCORE.
December 23, 1927.

Dear Mr. Sanjiva Kamath,

I am extremely sorry I cannot be present this year at the celebration of College Day, especially as the committee has so kindly asked me to respond to the toast of the retired teachers. I should have been glad to respond to the toast in person. As I am unable to do this, I can only say by letter that it is a very pleasant thing for a retired teacher to have such an assurance as this toast gives him, that, though absent, he is not forgotten.

One of the most attractive features of the life of a teacher in the Madras Christian College is that it brings him into intimate contact with his pupils, and

gives him a feeling of real affection for them. In the case of a great teacher like Dr. Miller, the feeling which he had for his 'boys' was little short of that which a father has for his children. It is not to be expected that every teacher can have the big heart and the all-embracing sympathy of Dr. Miller, but I am sure that all of us have this feeling to a greater or less extent. Because of this, we appreciate greatly the kindly thought which prompts you to put this toast upon your list. In so doing, you show us that the feeling which we cherish is reciprocated by you.

In responding to this toast, I may say that I am not yet fully qualified to be considered a retired teacher. I am in a kind of intermediate state, being no longer on the staff of the Madras Christian College but still teaching, and in a College which is so closely linked with the Madras Christian College, that it may almost be regarded as forming part of it. In the College at Alwaye I have found a sphere in which the strain is less than in Madras, but still a sphere in which 'something ere the end, may yet be done'. As most of you know, the College at Alwaye was founded by former students of the Madras Christian College. Through it, Mr. Varki, Mr. Chakko and those associated with them, are passing on the light which in Madras set their own hearts aflame. They are doing it with an ability and a self-sacrificing devotion which has already made their College a power for good on the West Coast. It is a very real pleasure to be with them; one is proud to be here and to watch the development of their great enterprise.

What is being done by means of a College at Alwaye is, I feel confident, being done in one way or another by former students of the Madras Christian College in every part of the country. Not only in educational work, but in occupations of every kind, former students are spreading the influence of the College. Some are in conspicuous positions in public life, others are in positions that are humbler—each is worthy of honour if his influence is effective for good in so far as he has opportunity. For all such former students it is well that College Day has been established. It is a day for mutual encouragement, a day for obtaining from the College and from each other renewed stimulus to wise and unselfish effort in the service of our fellow-men.

Such encouragement and stimulus are particularly needed at the present time. India is at the threshold of a new epoch in her history. The movement for political freedom which was started when the rule of the East India Company was brought to an end, has been gathering momentum in recent years. Now has come the time for a great advance. It is for you, former students of the Madras Christian College, and for such as you, to do what you can to guide the advance in the right direction. Political machinery is needed for this purpose, and the co-operation of our public men is required in order to secure that the country obtains the most efficient that can be devised. By having it criticized from every point of view and fully thought out, we shall do most in the end to accelerate the progress of the country. We know that even in the most democratic countries, political machinery is often worked so as to obtain honours and emoluments

for those who are adepts at pulling the wires. We also know that there is a widespread fear in various communities lest this should be the outcome in India of political change. It will rest with those who have higher principles, to see to it that political machinery is obtained which will result, not in privileges for some, but in good government for all.

I trust that you will have a successful gathering. Some may regret that Dr. Miller's birthday has not been found a convenient date for College Day. Birthdays are, however, often celebrated at other times than the actual date, and, though you meet a fortnight in advance of the date, you may still consider that you are celebrating Dr. Miller's birthday. College Day is a day of happy memories, and, for many, the memory which will be cherished most, will be that of their association with Dr. Miller.

The day on which you gather is also calculated to suggest other thoughts It is the last day of the year, a day which inevitably brings with it serious thoughts of the flight of time and the purpose of our lives. May it be for all a day of high resolves and earnest prayers, as we stand at the portals of another year. If we have ears to hear, we shall hear our Lord knocking at the door and saying to us—'Behold, I stand at the door and knock; if any man hear my voice and open the door, I will come in to him.' As we look out upon the evils of the world, as we look in upon the evils of our own hearts, we feel our need of Him. If we admit Him to our hearts, there are none of us so poor, none of us so weak. but that we can do our part in some movement which will be for the regeneration of mankind. So may we all help in bringing in the kingdom for which our Lord gave His life. Let us fling wide the door and welcome Him with gratitude and thanksgiving.

With affectionate regards,

Yours sincerely,

A. Moffat.

The toast of our young friends was proposed by Mr. A. S. Rajam, and Mr. M. P. Alexander of the third class replied. Mr. R. Chinnaswamy thanked the guests and Mr. C. B. Rama Rao replied in suitable terms. The function then terminated.

Literary Society

The Literary Society met thrice during the second term and twice during the third term. At its first meeting held on the 17th October, Mr. Sebastian of the First Class read a paper on 'East and West.' Mr. J. D. Asirvadam who presided pointed out that each nation had its own good points, and it should be their endeavour to imbibe from the West all that was good. The next meeting was held on the 25th October with Mr. Campbell in the chair. Mr. J. B. Appasamy of the Second Class spoke on 'Ruskin's message for us.' Several speakers followed. Mr. Abdul Majeed of the Second Class felt that Ruskin's message had a bearing on rural reconstruction. On the 7th December a debate was held when Mr. A. Krishnaswami of the First Class moved that India stood to profit by the

industrial methods of the West. Mr. V. Ganapathy of the First Class opposed the resolution. He pointed out that the introduction of machinery would intensify the unemployment problem among the people. The resolution was carried by a majority of six votes. On the 17th January the members met to hear Mr. Ramachandran of the First Class on rural reconstruction. All the members agreed that the rural parts of India needed reconstruction, and Mr. Subbarama Aiyer who presided asked the students to take up the work. The last meeting of the Society was held on 9th February when Mr. B Kesava Rao of the First Class spoke on the urgency of social reconstruction. Some members admitted the urgency but were against revolutionary proposals. Mr. S. Muhammad John of the Second Class acted as secretary of the Society throughout the year.

Rangiah Chetty Hostel

NEARLY SEVENTEEN YEARS AGO SOON AFTER THE DEATH of Mr. S. Rangiah Chetty, his sons—Mr. Ramanujam Chetty and Mr. Rajamannar Chetty—presented to the College a house built in Indian style to be converted into a hostel which would perpetuate the memory of their father. This house is situated in the neighbourhood of College buildings and is known as the Rangiah Chetty Hostel, the first unsectarian hostel attached to the College. Although the College has a large oil painting of Mr. Rangiah Chetty in the Reading Room, the hostel which commemorated his name did not possess one. This was undoubtedly a great want, and on Monday, 30th January Mr. Ramanujam Chetty and Mr. Rajamannar Chetty presented a portrait of their father to the hostel. Mr. S. A. Aiyasamy, a former member of the hostel, took the opportunity to present a portrait of Dr. and Mrs. Hogg to the hostel. It will be remembered that Dr. Hogg was the superintendent of Rangiah Chetty Hostel for several years, and the presentation was made as a token of gratitude of Mr. Aiyasami and his fellow members to Dr. and Mrs. Hogg. Mr. Justice M. Venkatasubba Rao presided and there was a fairly large gathering of members of the hostel and members of the staff. Mr. S. Ramanujam Chetty, M.A., B.L., in presenting the portrait said that it had been his desire for a long time to present a portrait of his father to the hostel which commemorated his name. He mentioned that it was Dr. Skinner's idea that the memorial to his father should take the shape of a hostel, and he (the speaker) and his brother readily agreed to purchase the house for the purpose. He was glad to learn that the hostel was popular, but felt that the life in the hostel would not be complete unless arrangements were made by the College authorities for boarding in the hostel. Mr. Ramanujam Chetty announced that he had decided to waive the right of reservation of seats for the Vysia students. Mr. Ramanujam Chetty continued to say that the time had come when people should cease to think communally and he hoped that the hostel would serve a better purpose with the removal of this reservation. He was satisfied that the hostel was under the capable supervision of Mr. Manikkam and would continue to be a fitting memorial to his father.

Mr. Justice Venkatasubba Rao in unveiling the portraits thanked the organisers for the opportunity and privilege of adding his own tribute to the

memory of the late Mr. S. Rangiah Chettiar. Many of them present did not personally know Mr. Rangiah Chettiar who was on the staff of the Christian College for nearly thirty-five years, and was a trusted lieutenant of Dr. Miller. Mr. Rangiah Chettiar had a remarkable memory, and his dignified courtesy impressed his colleagues and students. His students loved him immensely, and the news of his death under tragic circumstances was received with genuine sorrow by his old students throughout the Presidency. Mr. Venkatasubba Rao congratulated Mr. Ramanujam Chetty in withdrawing the proviso regarding reservation of seats in the hostel for Vysia boys. Regarding Dr. and Mrs. Hogg, he said that he had left the Christian College by the time Dr. Hogg entered the service of the College, but he had heard from all sides that Dr. Hogg was carrying on the best traditions of the College. The chairman felt sure that the portraits would be a source of inspiration to many generations of students.

Mr. J. P. Manikkam, Superintendent of the hostel, in accepting the portraits said that he had the privilege of being a student of Mr. Rangiah Chettiar. He thanked the donors for their thoughtfulness in presenting the portraits, and thanked the chairman and the guests for responding to the invitation in such large numbers.

U. T. C. Notes.

DURING THE SESSION 1926-27 OUR COLLEGE CONTINGENT of the University Training Corps was commanded by Mr. Mahadevan, and our thanks are due to him for the devoted labour which he put into it. At the beginning of this academic year, however, he left us in order to accept a post in the Madura College, and there was some inevitable delay before Mr. Boyd was appointed as his successor in command of the contingent. In spite of this, however, some strenuous work was carried out in the first term of the academic year, and this bore fruit at the annual camp which was held in Bangalore during the Michaelmas holidays. For the second year in succession, the contingent won the Company drill cup and its drill was very highly commended by the inspecting officer. We were also successful in the cross country run, which we won owing to excellent team-work, and, in the Battalion sports, we took second place and won the special trophy for the team relay race. In the end, chiefly owing to our chronic incapacity in the guard mounting competition, we just failed (by two points) to win the Willingdon Shield for general efficiency, which was won by St. Joseph's College, Trichinopoly, our contingent being runners-up for the second year in succession.

It was quite clear from what was done in camp that there is a considerable amount of real *esprit de corps* in the contingent, and that men are willing to work hard to win honours for the College. It does not seem, however, to be sufficiently recognized that if the corps is to fulfil a useful function, its members must work hard throughout the year. The purpose of the corps is, in the first place, to provide men who will be fit to become officers in the Indian Territorial Force. It also performs a secondary, but very important function in training men in habits of smartness, discipline and obedience. But if the corps is to fulfil these functions, the members must cultivate a more serious sense of their obligations than they at

present seem to have. There is a tendency to regard parades as things to be attended only when one has nothing better to do. Too many trivial reasons are offered for non-attendance. And too many men absent themselves without any reason at all. The result is that it is almost impossible to make any progress beyond the mere rudiments of training, and even the keener men begin to chafe at the failure to progress. The real remedy for this is that no man should join the corps, unless he is willing to work, and to work hard, throughout the year. No man should join if his sole idea is to attend an annual camp, and to wear a uniform now and then. This is fatal to the usefulness of the corps, and involves an unjustifiable expense of public money. Steps will be taken in future to ensure that men who, having secured a position in the corps, fail to fulfil their responsibilities shall be suitably dealt with. But the best solution would be that men should realize for themselves the necessity of stern loyalty to duty, even when it seems dull and wearisome, and should realize that they must not grudge a little personal inconvenience if they wish to partake of the privileges of the corps. It is evident that a few men already realize their responsibilities, but a glance at the attendance roll convinces one that the great majority do not. Men who absent themselves from parade on the ground of 'slight headache' or because they have 'urgent business in Mylapore' or because they have to 'conduct a visitor around the city' are merely playing with their responsibilities, and are doing harm not merely to themselves but to the whole contingent. It is to be hoped that the men of this contingent will make up their minds to be done with such half-hearted ways, and to build up a tradition of hard work, and stern regard for duty.

Malayalee Association

UNDER THE AUSPICES OF THE MALAYALEE ASSOCIATION Kavithilakan S. Parameswara Iyer, M.A., B.L., delivered an interesting address on the greatness of Kerala on Thursday, 9th February in the second class room. The meeting was well attended. The lecturer said that Kerala had a great past and served as a good field for research in archaeology and anthropology. The contribution of Kerala to the development of Sanskrit learning and culture was remarkable. Princes and people of Kerala had extended liberal patronage to all the fine arts and the land had offered great facilities for the advancement of learning. Mr. Parameswara Iyer pointed out that Kerala was the only land in the whole world where Hinduism, Buddhism, Jainism, Christianity and Muhammadanism met together in toleration. Again it was the only place where various systems of Indian philosophy, *Mimamsa*, *Dwaita* and *Adwaita* flourished side by side. Sankaracharya, one of the great philosophers of the world, was a son of Kerala. The people of Kerala were well known for their hospitality and spirit of adventure, and Mr. Parameswara Iyer hoped that the Kerala Society which was recently formed would play a useful part in the revival of Kerala culture. Mr. Parameswara Iyer concluded his speech by paying a tribute to the work of the Christian missionary bodies in the field of education in Kerala. With a vote of thanks proposed by Mr. Chandran, the meeting terminated.

Commemoration Service

THE COMMEMORATION SERVICE WAS HELD IN THE ANDERSON HALL at 12 noon on Friday, 27th January. All the students of the College and members of the staff were present. The religious portion of the service was conducted by Mr. Asirvatham and Dr. Meston. Mr. Matthews who delivered the commemoration address said that he recently heard a distinguished old boy of the College say that whatever might be the political future of India, the future of the Madras Christian College was secure. He could understand Hindus being greatly attached to the Hindu University or the Muhammadans to the Aligarh University. This could be explained since the two universities sought to propagate the culture of their respective civilizations. But what was the secret of the loyalty to this College? Surely it was due to the recognition by students past and present that the College was actuated by the motive of service, and supported from overseas by friends of India in no spirit of condescensions but in humble recognition of what Christ had meant to them, and in the desire that for themselves as for India the spirit of Jesus might more and more control all the relations of life. Dr. Meston pronounced the benediction and the gathering then dispersed.

First Student's Home Hostel Day

THE MEMBERS OF THE FIRST STUDENTS' HOME celebrated their hostel day on Saturday, 4th February. The Hon. Mr. A. Ranganatha Mudaliar, Minister in the Government of Madras presided. The function was attended by a number of old members of the hostel besides members of the staff. After tea the gathering adjourned to the terrace where the public meeting was held. The proceedings commenced with prayer and recitation, and Mr. Sambamurthi played a few selections on a flute. Mr. A. Krishnamurthi, secretary of the hostel, proposed the toast of the College and referred to the high ideals placed before the students of the College, and to the great interest evinced by the members of the staff in the welfare of the students. Mr. Matthews, who responded to the toast, said that he was sorry to learn that seats were vacant in the hostel. He was glad to hear expressions of loyalty to the College and hoped that members would be able to understand each other better through their stay in the hostel. Mr. Ramanatha Sarma proposed the toast of the hostel. He pointed out the advantages of living together, and put in a plea for a residential manager. On behalf of the old members Mr. Ramanathan of the Mysore Government Service recalled some of the incidents in the hostel when he was a member of the hostel, and expressed his great pleasure at the opportunity of seeing the hostel once again. He appealed to the members to maintain the traditions of the hostel.

The Hon. Minister in bringing the proceedings to a close thanked the hostel authorities for the valuable opportunity given him to come into intimate contact with the younger generation. As a student in the Christian College he was a member of a sister hostel, the Second Students' Home, and he could very well appreciate the value the members attached to hostel life. They owed a great debt of gratitude to Dr. Miller whose generosity created the huge pile of buildings and hostels round about it. The Hon. Minister then distributed prizes to the

winners in the fancy dress competition, and the function terminated with a vote of thanks to the chairman and the guests.

Annual Sports

THE COLLEGE ANNUAL ATHLETIC SPORTS ARE ALWAYS anticipated with keen interest by students and members of the staff since they provide a real diversion to both in the middle of a busy term. A large number of Students gathered on the Beach grounds on Friday, 27th January to witness the annual sports. The number of competitors was larger than usual. The Senatus was 'At Home' to the lecturers and the competitors. Thanks are due to Mr. Mia for acting as starter.

The following are the winners in the several events:

(1) HURDLE RACE
W. Eling.
C. Chandy.

(2) THROWING THE CRICKET BALL
W. E. Hobday.
W. Eling.
A. J. Cherian.

(3) HIGH JUMP
K. Kuruvilla Jacob.
D. A. Cole.
R. Swaminathen.

(4) HUNDRED YARDS DASH
A. Eling.
Zachariah David.
W. Eling.

(5) LONG JUMP
C. Chandy.
Paulson.
A. Eling.

(6) QUARTER MILE RACE
A. Eling.
W. Eling.
C. Chandy.

(7) PUTTING THE SHOT
C. Chandy.
W. Eling.
W. E. Hobday.

(8) SACK RACE
J. P. Bashkar.
A. Rahman Khan.

(9) MILE RACE
C. Chandy.
A. Eling.
Jonathan.

(10) RELAY RACE
Fourth Class.
First Class.

(11) TUG OF WAR
Fourth Class.

(12) FANCY DRESS
C. Alavandar Chetty.
M. S. Krishna Rao.

CHAMPIONSHIP
C. Chandy.

Athletics

LAST YEAR WAS A YEAR OF RECORD SUCCESS IN INTER-COLLEGIATE Competitions and the present year bids fair to approach it, if not to equal it. But it is too early yet to say. The Inter-collegiate sports have been left to an unfortunately late date, and, at time of writing are still a week ahead.

Football

IN THE INTER-COLLEGIATE COMPETITION, the team was not so successful as last year. This was partly due to an undue share of bad luck in the matter of injuries, but it was also partly due to a tendency in the earlier part of the competition to take some opponents much too lightly. This is a tendency which must be guarded against. We owe it to our opponents to put our best team against them

on every occasion. The football team, however, retrieved its fortunes gloriously in the Wilson Cup Competition. Playing none too consistently in the earlier stages, it gradually pulled up, and having beaten the Engineering, Veterinary and Pachaiyappa's Colleges, met the Medical College in the final. This was a game of thrills, and finally resulted in a victory by one goal to nil. It required a desperate effort to win, and the success was largely due to the steadiness and determination of the defence, and particularly to the brilliant play of our captain and goal-keeper, J. A. Thivy in this, as in every other game. G. Oomen (centre-half) was a tower of strength, both in attack and defence.

Hockey

THIS YEAR'S TEAM HAS EASILY MAINTAINED THE HIGH STANDARD OF PLAY which was reached last year, though it showed a curious tendency to beat the stronger opponents, and lose a point to the weaker ones. Not a single match, however, was lost throughout the year. The Inter-collegiate Competition was unfortunately not completed, and the Committee finally decided to award the championship to our College. It was unfortunate that the Competition was not played through, and there was no real reason why it should not have been. From this point of view, the Presidency College Competition was a much more successful one. In this, we played three matches, finally defeating the Mahomedan College by three goals to one and thus winning the competition. We are grateful to our neighbours of the Presidency College for running this well organized competition. Throughout the year, the outstanding player in our team has been our captain Arthur Eling, but the whole team kept up a very high standard. The best exhibition was probably that against Loyola College, when, after a goal-less first half, we scored four goals in the second half and looked like scoring more.

Cricket

WE HAVE NOT YET BEGUN TO SHOW SIGNS OF PRODUCING A REALLY GOOD cricket team. Whatever be the reason, we seem to be very little use at cricket. But we did win at least one match this year, and presumably some people got some exercise and amusement which is, after all, the main matter.

Tennis

TENNIS HAS GONE ON WITH ITS USUAL VIGOUR THROUGHOUT THE SESSION, catering for far more players than any of the other games. Our own tennis championship was won by C. S. Natarajan who has been a prominent player for several seasons now, but the Inter-collegiate Championship has not yet been completed.

In the corresponding issue of the magazine last year, some questions were raised as to the proper place of tournaments and organized competitions in the athletic life of the College. It was pointed out that these might easily occupy too large a place in our thoughts, and might not be entirely to the advantage of the bulk of the students of the College. These questions still demand consideration, and are rendered even more urgent by the failure of the Inter-collegiate Association to complete its tournaments properly this season. It is at least arguable that it would be better to transform all the competitions into knock-out tournaments, and to give up the points system altogether. There would then be

some assurance that the competitions would be satisfactorily completed. More time would be left for practice and inter-class games within the colleges. And the desire for further inter-collegiate competition would be met by the arrangement of 'friendly' matches. One important result of this might be to keep some inter-collegiate matches free from the dangerous 'pot-hunting' atmosphere.

Mr. Vedam Venkata Sastri

ANOTHER PERSON HONOURED AT THE CONVOCATION OF THE ANDHRA UNIVERSITY was Mr. Vedam Venkataraya Sastri on whom the title of Kala-Prapurna was conferred by His Excellency the Chancellor. Mr. Sastri was the Sanskrit Pandit of this institution for twenty-five years and retired from College service in 1911. Mr. Sastri is a great Sanskrit and Telugu scholar and although he is now about seventy-three years old, we are glad to know that he is still enjoying good health. He holds a high position in contemporary Telugu literature as an author of several dramatic works, and his commentaries on Telugu literature are valued greatly. The ceremony of bestowing the title on Mr. Sastri took the quaint shape of presenting him with an expensive shawl in true oriental fashion. Our congratulations to Kala-Prapurna Vedam Venkataraya Sastri.

The Philosophical Association.

THE LAST MEETING OF THE PHILOSOPHICAL ASSOCIATION, for the current academic year was held on Thursday, the 23rd of February, 1928, when Dr. Woodburne gave a lecture on Associationist Psychology. He surveyed associationism from Locke to Hamilton and pointed out that the main principles of association, although not called by that name were laid down by Aristotle. After surveying what was distinctive in the teaching of several associationists, he concluded by saying that it is possible to distinguish as many principles of association as we have analytical skill for, but that ultimately what seems to be the one principle of association, of which all the others tabulated by associationists are only particular instances, is interest. Accordingly he claimed that modern psychology has moved away from the wholly structural standpoint of associationism, and has adopted a more functional view of the associative processes involved in consciousness.

Dr. Cornelius who presided on the occasion thanked the speaker for his address, and remarked looking back on the work of the Philosophical association during the year, that while there was a great deal to be thankful for, it was his regret that the Philosophical aasociation was not employed as a place where students met for free and informal discussion of philosophical problems, as it should be. He hoped that next year it will be so employed. He thanked the secretary for the zeal and industry which he put into the work of the association.

The secretary thanked Dr. Woodburne for his interesting lecture, recorded the regret of the association over the illness of Mr. Theodore, and hoped that Mr. Theodore will be soon with us again. He also thanked Dr. Cornelius for serving as President of the association during the current year.

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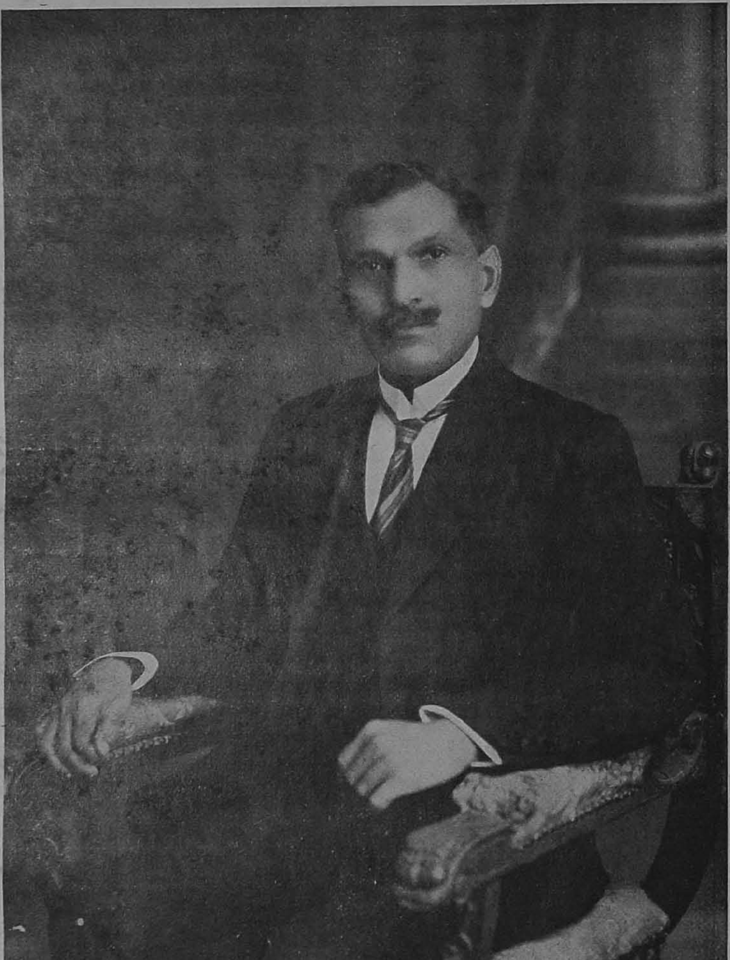

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The Budget and Education[1]

FOR the sixth year in succession it is possible for us who are concerned with, and have a considerable stake in, the education of this Presidency to consider the provision which Government have made for it in the financial year on which we have entered. To begin with we may look at

I. The Provision under 31, Education.

The amount which the Government have set apart under this head for 1928-29 is Rs 2,43,06,600, an increase of more than 25 lakhs over the estimate of last year, and of almost forty-five lakhs above that of two years ago. The Ministry therefore cannot be accused of failing to regard education as a living and growing power. We are confirmed in this position when we find that in the whole Budget there are only three other items for which the provision that is made approaches in any degree to that which is made for education. For the General Administration of the Presidency a sum of just over two and a half crores is set aside; for Jails, Convict Settlements, and Police taken together a sum of Rs 2,28,00,000; and for Civil Works a sum of Rs 2,18,00,000. The value of education is thus fully recognized by the position which it occupies financially in the Budget. Only the civil administration of the Presidency is suffered to cost more. Further, more than half the Budget allotment is devoted to elementary education. And still further, while last year saw thirteen per cent of the whole Budget assigned to education, the percentage this year is fourteen. On general grounds there is a recognition of growth, and of growth along lines that are conducive to the upbuildings of a nation's most precious asset—its youth. We heartily welcome this feature in the Budget. And we are now in a position to consider

II. The Total Amount spent on Education.

What is given under head No. 31 of the Budget is the main part of the proposed expenditure on Education, but it is by no means the whole. For instance

[1] An address delivered at the Kodaikanal Missionary Educational Conference, May 18th 1928.

under other headings there is provision of almost twenty-seven lakhs for Reformatory and Certified Schools. Medical Schools and Colleges absorb practically twelve lakhs ; and Industrial Schools two lakhs. The Commissioner of Labour has almost ten lakhs put at his disposal for the educational betterment of the Depressed Classes, while the reclamation of the Kallars, in which over six hundred teachers are employed, requires the greater part of three and a quarter lakhs. Then we must remember the Veterinary College, and the Agricultural College and schools, and, in the Budget, that means practically two and a half lakhs. Further, if education is to be imparted it must be tested, and in our present condition of frailty that means examinations, the provision for which is two and a half lakhs; while so long as education continues we are unable to imitate Bolpur but must have buildings for it, and the P.W.D. requires more than seven and a quarter lakhs for this. And so it goes on, with the result that when we have added one item to another we find that the amount which it is intended to take from the public purse for the maintenance of education in this Presidency during 1928–29 is not less than four and a half crores. In round figures that is £ 3,400,000 or $ 17,000,000. It is a good total in itself and all the better because it is not a stationary figure. But there is room, if not a crying need, for a much more generous provision. Let me mention only two figures. The Civil Service Estimates for Education in England and Scotland were published a few weeks ago. The population of this Presidency is over forty-two millions. That of England is not forty millions, and it is proposed to spend on education in England a sum of forty-three million pounds. Scotland has a population of five millions, or say roughly that of North Arcot, South Arcot, and Chittoor combined, and it has assigned for its education during the current year out of public funds over six million pounds or almost double of what this Presidency, with its twenty-six districts and the Agency in addition, intends to spend on the education of its youth. There is still room for advance, then. So far, we have seen that the amount which is to come out of public funds for education is most decidedly on the increase, and that it compares very favourably with the other expenditures which are included in the Budget of Madras. Another gratifying feature presents itself when we turn to

III. University Education.

There are two universities in this Presidency, and we may well believe that from a financial point of view they have both healthy appetites. Yet there is little sign of their voracity in the Budget. The amount allotted to them is only Rs 6,11,000, or Rs 1,22,600, more than was given to them last year. So far then those who advocate, and rightly advocate, expenditure on the education of the masses can find nothing in the Budget to support the position that primary education is being starved to enable the universities to thrive lustily. The member of the family who is getting more than a crore and thirty lakhs can hardly have any grudging words to say to the member who has to be content with six lakhs.

The Andhra University will undoubtedly claim and receive more as it grows in strength. At present it is in the position of not a few people, it is engaged in

house-hunting. We shall all be glad when it has a settled home of its own. addition to wishing for a habitation, it is also wishing to become the manager of certain of its colleges as well as continuing to be the controller of them all. Evidently it has not realized the perils to which it would be exposed if that wish were granted.

The University of Madras has been generously treated by the Government; and I must say that the University has made the very best use of the money thus received. Any one who reads the Report of the University that was passed at the March meeting of the Senate cannot fail to be struck with the rapid advance which the university is making towards the goal of a teaching university. Facilities for research are being provided with most encouraging rapidity, and more especially in matters and subjects connected with South India. The university is a real centre of learning.

There is one obstacle in the way of the development of the University to which attention must be given with all seriousness and without delay. The obstacle to which I refer is the affiliating functions which the university has to discharge. These are becoming a heavy burden, and, if the burden is not in great part removed within a very short time, two undesirable results will follow. On the one hand the University will be hindered in its endeavour to become a truly teaching and residential university; and on the other hand it will become less and less able to be of help to the large body of affiliated colleges. The continuance of affiliating functions is steadily weakening the university, though it is making a valiant effort to counteract this quiet undermining. A day of brightness for higher education in this Presidency will dawn when the affiliated colleges arise and claim independent life for themselves through the medium of one or more universities. A lead is being given by Sri Minakshi College in Chidambaram which, through private generosity, is to be transformed into a university. It is hard to believe that such action will be solitary; and indeed a recent announcement in the press indicates that it is not so. Meantime we await with interest the pronouncement of Government on the report of the committee appointed to consider the question of establishing a university for the Tamil districts.

Up to this point we have been occupied with features of the Budget that which bring satisfaction to those who peruse it. Less re-assuring aspects present themselves when we direct our attention to

IV. Collegiate Education.

As our concern is with the general education of the Presidency, we make no reference under this head to professional colleges. With this limitation in mind we note that there are only two lines of figures in the Budget with which we have to deal. They are these:

Government Arts Colleges	Rs 11,24,500
Grants to non-Government Arts Colleges	3,65,100

(1) Now any one looking at these two lines would conclude, not unnaturally, that by far and away the greater amount of collegiate work in the Presidency was

done by colleges managed by Government. Imagine the astonishment of such a one when he is told that there are 44 Arts colleges in the Presidency, and that only ten of these are under State management; that 12,258 students attend the Arts colleges of the Presidency, and that of these only 2934 are members of Government colleges. He would almost inevitably ask: Does the Ministry really know when it frames its budget, and do the legislators know when they pass the budget, that less than a quarter of those attending Arts colleges are students of Government colleges, while more than three-quarters are students of non-Government colleges?

(2) Now, if it be pointed out to such a questioner, as in all honesty it must be, that the attention of the Ministry has been drawn to this fact again and again, he will probably say: Then surely Government are taking steps to set right this grievous inequality? And again the answer is bound to be a surprise to him. For we have only to direct his attention to last year's budget, and he will rub his eyes as he looks at the figures. For what he will find is this: that the amount allotted to Government colleges in 1928–29 exceeds that allotted to them in 1927–28 by more than Rs 1,35,000, while the amount allotted to non-Government colleges is less by Rs 1,19,000.

(3) But surely, our surprised questioner will continue, there must be some redeeming feature. And again candour, compels us to admit that there are one or two features which have not so far been mentioned, but they can hardly be characterized as redeeming. What are they? In the first place, the allotment of eleven and a quarter lakhs to Government colleges is not all. There must be included what is given under the heading of Civil Works, that is the amount spent on Government college buildings. The figure for this we find to be Rs 2,57,300. Then in the next place, we must note a supplementary grant that was made before the Budget session ended; the amount of this was Rs 1,00,200. Thus what is to be expended on Government colleges under the present budget estimates during 1928–29 is really Rs 14,82,000. To maintain ten Government colleges in which less than 3000 students are being educated the Ministry assigns almost fifteen lakhs. For the maintenance of thirty-four non-Government colleges with over 9000 students the Ministry provides just over three and a half lakhs. Is the Ministry prepared to rectify this glaring anomaly?

At the first glance things do not look so bad when we turn to

V. Secondary Education.

The figures relating to it in the Budget are:

Government Secondary Schools	Rs	2,49,200
Direct Grants to non-Government Secondary Schools		11,63,600
Grants to Local Bodies for Secondary Education		9,00,800

(1) At first glance, I have said, things look less discouraging here. For if, compared with last year, Government schools receive an addition of Rs 5000, the amount received by non-Government, that is, aided schools is Rs 59,000 in advance of that assigned last year, and the amount to the schools of local bodies is an advance of Rs 42,400. Both these seem steps in the right direction. So far, good.

(2) But now our persistent questioner begins to raise his voice. He says that he wishes to know something about the number of schools under the different managements and the number of pupils attending them. His wish may be speedily gratified. Government manages 34 secondary schools, and these are attended by 8084 pupils : local and municipal bodies are the managers of 234 secondary schools with 55,503 pupils ; while there are 324 schools under private management and these are attended by 1,12,557 boys and girls. In other words the number of pupils in secondary schools under private management is more than double the number in schools under board management, and fourteen times the number in schools under government management. Our questioner at once acknowledges that a scrutiny of the budget figures would never have led him even to suspect that the distribution of schools and pupils was as the facts disclose. Is it wonderful if he asks : Can such disproportion be for the benefit of education ?

(3) There is another question which he propounds to us. I thought, he says, that secondary education was recognized as the appropriate field of private effort. Yes, we have to reply. So it has been recognized in official educational pronouncements, and not so long ago in a statement of the Government of Madras itself. In that case, he replies, I hope you will not think me rather hyper-critical. I quite admit that an addition of Rs 5000 to the amount allotted to Government secondary schools over the amount allotted last year is very small. But when, according to accepted line of action there should really be withdrawal of official effort and so reduction in official allotment, an enhancement however small seems out of place. You are quite right, we are bound to admit ; the trouble is that if there is any policy, it does not find expression in the figures of the Budget.

(4) Our questioner is not done with us yet. He evidently feels that our last answer was rather feeble, and I am not surprised. It has not satisfied him, and his appetite for information has been whetted. Take the Government secondary schools, he says. The provision for them in the budget is in round figures two and a half lakhs. Then to this has to be added Rs 1,15,500 for buildings to be found in the Civil Works part of the Budget. So that altogether it costs the public three lakhs and sixty thousand rupees to educate eight thousand pupils in schools maintained by Government. Now, according to the Budget, if these eight thousand boys and girls were being educated in Board and Municipal schools the cost to public funds would be one lakh and thirty thousand ; while if they were in schools under private management the tax payer would have to give no more than eighty-three thousand rupees. Is there any ground which can be urged in the name of fairness for this remarkable discrepancy, asks our questioner. To educate eight thousand pupils in schools under one form of management costs public funds more than three and a half lakhs, to educate the same number in schools under another type of management costs public funds one lakh and a third, while to educate them under a third type costs public funds under eighty-five thousand rupees. And our inquisitor now showers his questions on us like hailstones. Has this sort of thing gone on for any length of time ? Do people really understand what is taking place ? Is this the way to advance education ? Is the Ministry satisfied with this

use of the public funds with which they are entrusted? Our questioner has us at his mercy. What can we do but hold up our hands and shout, Kamerad?

We turn from this unsatisfactory region of secondary education, and direct our attention to

VI. Elementary Education.

Here there are figures which let in a ray of light on our somewhat darkened outlook. They are as follows:

Government Primary Schools	Rs	1,300
Direct Grants to non-Government Primary Schools ..		67,300
Grants to Local Bodies for Primary Education		1,29,09,700

(1) When we look at the first of these items we no longer throw up our hands, on the contrary we face our persistent questioner with no little boldness. Do you notice, we say, that Government has a policy here and is sticking to it? Last year the amount given to Government primary schools was Rs 5,000, this year it is only Rs 1,300. At this rate there will soon be a complete blank under this head in the Budget. The Government are most heartily to be congratulated. But we notice that our questioner does not give us the support which we expected from him in moving this vote of thanks. What is wrong with you? we ask. Well, he says, how is it that the Director of Public Instruction in his last report says not only that there are a number of Government primary schools but that their number has increased by over a thousand? And then we remember that if the schools under the Education Department are being eliminated those under other Government departments are being increased. It looks very much like a case of the front door being tightly closed, but the back door being kept open all the time. We shall have to think again before we move that vote of thanks.

(2) The second item is a grant of Rs 67,300 to boarding schools for Indian orphans. The vote of thanks is carried here without dissentient.

(3) The third line represents three separate grants. We shall take them one by one. And first, there is a grant of Rs 1,82,100 to Village Panchayets. We noticed last year that this is a new agency of control. This year the grant which it receives is almost double of that which it then received. Some 500 schools are now conducted by it. Some information is certainly required before we can pass any opinion on the value of this departure. The expenditure seems to be somewhat similar to that of Local Bodies on their schools.

(4) The second constituent of the third line is a subsidy of Rs 72,63,200 to Local Bodies for the maintenance of the primary schools which they manage. There are 15,480 of these, and they are attended by 903,893 boys and girls. The amount is an increase of Rs 7,85,000 upon that of last year.

(5) The third constituent is a grant of Rs 53,12,900 to District Educational Councils for the aided schools under their supervision. Now there are 32,563 primary schools under private management, and they are attended by 1,241,597 pupils. We gratefully acknowledge that the grant is an increase of Rs 9,81,700 on the amount which was allocated to District Educational Councils last year. We

also notice with gratitude that the allocation of last year as given in the Budget was in the course of the year enhanced by some eight lakhs. In this way the Ministry made amends for the wholly inadequate grant to aided primary schools which was inserted in the Budget. The alteration was the result of the representations which were made to Government, representations which received the support of the press. For a continuance of this attitude of Government we are most grateful. It goes a long way to remove a patent anomaly.

(6) The anomaly, however, is not wholly removed, says our persistent questioner. And we have to admit that he is right. The figures show that, in round figures, for every two children who attend a Board School there are three who attend a school under private management. Yet the Boards receive an allotment of nineteen and a half lakhs more than the private managers. Can any principle of equity be urged in favour of the position which this distribution of public funds declares, namely that the more an agency does for the spread of primary education the less financial support will it receive from the State? This is the very way to hinder the advance of elementary education; but it is the way which is persisted in year after year. Is nothing to be done to put it right? If legislation is needed, as is sometimes asserted, surely it is not beyond the wit of the Ministry to devise and carry through such legislation. Even proposed legislation, so far as I have seen it, holds out no hope of this most serious obstacle in the way of elementary education being removed. And until that is done a heavy responsibility lies at the door of the Ministry of Education.

There is one other matter which we must consider before we sum up the impression which the Budget leaves upon us and that is

VII. The Inspection of Education.

The allotment for this highly important service is Rs 16,62,700, and, without fear of contradiction, I may say at once that this sum is wholly inadequate. It provides for an inspecting staff of 433 members. Now that is practically what the size of the inspectorate was prior to the reorganization in 1922. In that year changes were made so as to secure a more satisfactory cadre, and at the same time a large reduction was made in the number of those carrying on the work of inspection. I drew attention to this in connexion with the 1923–24 budget; and while all heartily supported every effort that was made to improve the quality of the inspectorate, no one could look but with dismay at the work which was being placed on the shoulders of the diminished staff. Now, after five years we are to have an inspectorate which shows no diminution on that which was in existence in 1922. And in the course of these five years, the Director's Report tells us, there has been an increase of practically seven thousand schools. What is the result? There is an inspecting staff of 440 several of whom at any one time may be expected to be on leave. And there are over 50,000 schools of general education in the presidency. So that we may say that in the course of a year there are 400 men and women to carry on the inspection of 50,000 schools. The thing cannot be done. Remember where many of these schools

are placed; remember climatic conditions; remember the incidence of holidays. How is it possible to visit these fifty thousand schools in the course of a year? And if railway and bus have made visiting possible, what manner of inspection can be carried on in these conditions? What real acquaintance with the work of each school? What help and encouragement rendered to the teachers? What guidance to managers? All honour to the inspectors for what they do. And when we are inclined to grumble over their report or to comment with some force on the suggestions made, let us not forget that to them has been assigned the impossible. The task which is theirs is beyond the powers of the best. But while we may be able to cultivate this attitude, I do not think that we shall be able to keep back our persistent questioner from saying: And what about the bearing of all this on the education of the youth of the presidency?

We have now gone over several features of the Budget so far as it concerns education in South India during the current financial year. We have said nothing about professional institutions, nor of special schools, nor of what is called European education. These are of the highest moment and raise many problems; but they require separate treatment. We must confine ourselves to what the Budget provides for general education. And when we do that as we have sought to do, we are led to

VIII. Certain Conclusions.

These may be summed up in one caption which is written over all these pages of figures in the educational portion of the Budget, and that caption is: WANTED A POLICY.

i. Before we can have any stable policy in education we must know clearly what is *the relation between the Ministry of Education and the Department of Education.* Are they parallel and largely independent? or are they co-operative in their activities? Those of us who come from other countries know what the relation of the Education Minister is to the Board of Education. The Minister has no assured permanency; the Board has. The Minister is in office when his political party puts him there; the members of the Board bear office because of capacity for educational administration. The Minister initiates legislation in the appropriate chamber, but he does it after full consultation with the appropriate officials of the Board. That is a reasonable procedure, and seems to be the only one which can secure satisfactory legislation in regard to education. If such a procedure is followed here, we may expect the best of results. But if it is not, what is to prevent education from becoming the handmaid of politics? We must press therefore for a clear pronouncement on the relation between the Ministry and the Department of Education.

ii. But if this is to be done we must also have a clear idea of *the function of the Education Department.* Here if anywhere a real policy has to be inaugurated.

(a) At present *the Department controls certain parts of education but not the whole system.* Let me quote from the last Report of the Director of Public Instruction.

The problem of the control of elementary education is complicated by the fact that in addition to the schools under the Director of Public Instruction there are schools under the Labour Department, the Jail Department, the Fisheries Department, the Police Department, the Forest Department and under the Registrar General of Panchayats.

This is not control, it is chaos. By it the spending of money is increased, the number of salaries is increased, the post office revenue is increased, the possibility of friction is increased; indeed it looks as if everything had a chance of being increased save the spread of education. Surely the Department must have real control.

(b) Again *the Department is partly a controller, partly a manager.* The combination arose out of a historical situation which no longer exists, and with the change partly in the situation the justification for the combination has gone. Every year shows that it presents unnecessary difficulties, that it leads to large financial commitments which might be dispensed with, and that it prejudices the power of the Department as the controller of education. Let Government divest itself of the schools and colleges which it manages, let it hand them over to appropriate bodies, and a two-fold benefit will result. In the first place, there will be no more of these financial inequalities to which we have drawn attention when dealing with the provision in the Budget for colleges and schools. The tax payer will gain by this as well as education. And in the second place, the Department with an enhanced administrative force, and a strong inspectorate, will be able to exercise a control over education that will recognize merit, encourage the teacher, stimulate the adoption of truer standards, draw forth interest, and make education a powerful factor in national development. The opportunity for the initiation of such a policy lies open to Government; the need for it is urgent. Let Government seize it; and everyone who values education, who participates in it, and who supports it, will welcome this step from chaos into a control which stabilizes and enriches education, and links education with the highest aspirations of the nation.

iii. There is urgent need for a clear *realization of the part which inspection plays in education.* An inspectorate has at least a three-fold function. It must acquaint itself with what is being done in each school and with the standards that obtain, and in gaining this acquaintance it has to keep these standards at the highest possible level. Then it has to render assistance to the teacher, enabling him to come into contact with educational methods and advance, so that his teaching may profit. And further the inspectorate must satisfy itself that the money which is being given to schools out of public funds is being well spent. The inspector has a relation to the pupil, the teacher, and the tax-payer. In present circumstances he cannot discharge all these obligations, far less discharge them satisfactorily. The result is that education suffers, and suffers seriously. There is a feeling, the strength of which I have been surprised to note, that what is spent on inspection is in large measure not well spent. There are two grounds for this. It has been represented to me that there are those engaged in the inspecting agency who do not command respect. This is a matter into which I am not competent to go; but if there is ground in this complaint there is little difficulty in discovering it and surely there can be no difficulty in taking the appropriate steps. If the inspectorate is to carry

out its manifold duties there must be no dubiety as to the professional and educational qualifications of those who compose it. At the same time I must say that anyone who compares the inspectorate of the present day with that of, say, twenty-five years ago, has grounds for satisfaction. The other ground is that even when the best of inspectors visits a school he can do so little. That is due, as we all recognize, to the smallness of the body on which such responsible duties fall. The meagreness of expenditure on the inspectorate is really equivalent to an unsatisfactory employment of public funds. Were the amount doubled something of real value could be done at once. If it is kept at its present figure there is not a body which is sufficient to do anything approaching justice to the schools, the scholars, and the teachers of the Presidency. No wonder then that people say, if nothing better can be done than is being done, why do it at all? Such a question is really a counsel of despair. Let us be grateful for the work which is being done at present by our inspectors and inspectresses amidst almost insuperable obstacles. But let us also press upon the Ministry the need for the recognition of the true place of the inspectorate in education, and for the incorporation of this recognition both in educational policy and in the Budget.

iv. We need a clear recognition by the State that *there is only one way by which the education of this Presidency can be advanced with soundness economy and rapidity*. And that way is—*by welcoming into a partnership of effort, on a basis of equality, every stable agency that seeks to promote the education of the youth of South India*. Let us take it that Government will speedily inaugurate a policy of divesting itself of management, and of confining itself to inspection, administration, and control. We are then left with two great agencies for the diffusion of education: local and private. These put into the education of the Presidency large sums of money. Local and Municipal Boards, out of their own resources, that is, out of the money which under statute they raise by taxation, make a contribution of forty-five lakhs towards the spread of education. Private effort, out of its own pocket and perfectly independently of what Government give, makes a wholly voluntary contribution of fifty-three lakhs per annum towards the same object. These are partners in the magnificent enterprise of training the minds and characters of the young men and women of South India. They are partners entitled, on the basis of work done, to receive equality of treatment at the hands of the State. But the present Budget says No, and several budgets which we have examined in past years also say No. Not only that, but the Report of the Director of Public Instruction tells the same tale. Look at such a sentence as this. The Director is speaking of equipment, and he says:

During the quinquennium equipment grants to the extent of over two lakhs were paid to aided schools, and subsidies for equipment amounting to Rs 76 lakhs were paid to local bodies for equipping high and middle schools.

Such inequality of treatment is almost unbelievable. How is education to progress in this way? And the position becomes even worse when we take note of another statement in the Director's latest report. He is dealing with the increase in the amount which has been expended on education in the course of the quinquen-

nium from different sources, public, local, and private. And as regards that which comes from local sources he says :

The increase in District Board and Municipal expenditure was largely met from the Provincial subsidies to local bodies.

Thus it comes about that we are not justified in speaking of the local bodies as making a contribution of forty-five lakhs from their own resources, for a certain portion of that is, as we now know, a grant from Government which has passed through the books of the local bodies. On the same analogy some part of Government grant-in-aid might be included as their own in the contribution which private agencies make to education. But in what I have stated, that is not done. The fifty-three lakhs which these agencies give is a contribution made entirely out of their own resources. And yet, as the Budget shows, these private agencies which are carrying the heaviest part of the burden of the education of the Presidency, and which are contributing so generously out of their own pockets, receive at the hands of the State treatment which is discouraging and unequal. They are partners entitled to equality of treatment on the basis of work done. And the State time and again through its budget says, No. And so long as the Ministry allows that No to stand, so long as it does not use every endeavour to secure its removal, so long as it abstains from initiating a policy which will change that No into Yes, by the aid (if need be) of legislation, so long must the Ministry regard itself, and *submit to be regarded, as placing a definite obstacle in the way of the spread of* education. Can it be that the Ministry of Education will continue to put a barrier in the way of the attainment of that object which it was specifically created to advance? Let the Ministry save itself from this reproach, let it place local and private effort on the basis of a partnership, neither partner receiving preferential or partial treatment, both receiving that treatment and only that to which their share in the great enterprise of education entitles them, and it will roll away the reproach of the present position. It will do more than that. It will pour new life into education, and set it on a cycle of advance which will surprise its critics, rejoice its supporters, and lead the country into reaches of unexampled prosperity and power.

The month after next I shall have completed thirty-five years spent in the service of the education of this Presidency. It has been a great privilege. Much has happened in the past to give one great hope ; and the best is yet to be. I count it a joy to have served so long in the cause of one form of aided education, that form which every year confirms me in regarding as the type most definitely suited for the supply of India's deepest needs. But I have sought consistently all through these years to support the cause of aided education as a whole, of which as the Director's Report informs us the part under Christian management is only twenty-five per cent. For I believe that in aided education the country possesses a key which unlocks the door into an education of which it may be proud and from which it will reap the fullest benefits for personal character and national advance. But matters educational cannot long continue in this Presidency in the condition which Budgets and Director's Reports disclose. Much may be done by more satisfactory financial adjustments. But that will go only a part of the way. What

is needed is a definite policy wherein the considerations which I have mentioned will find their appropriate setting and receive their true recognition. I appeal most earnestly to the Ministry to see to it that no time is lost, and that such a policy is speedily conceived, generously executed, and consistently adhered to.

MADRAS

W. MESTON.

How We Know

Much of the confusion that has attended the attempts to construct a theory of knowledge is due to the conception of it as an entity rather than as a process. Cowper represents the popular opinion in saying, 'Knowledge dwells in heads replete with thoughts of other men.' The mind of man is thought to be a receptacle designed to contain knowledge even as a bucket contains water. To be sure the contents are mental and therefore immaterial, intangible and incapable of physical manipulation. On that account it is difficult to compare them with the material things to which they are related. The realist who undertakes to discover the presence or absence of correspondence has thus a tantalizing problem on his hands. The idealist too can scarcely escape the danger of regarding the fragments of knowledge as in some degree structural when he attempts to apply his test of coherence. The analogy of a tool or an instrument which the pragmatist employs runs the same risk of a structural interpretation.

Is this danger one that can be obviated? The modern psychological emphasis on process ought to correct some of the mistakes of the past. Of course there is no such thing as a contentless process either in the mental or mechanical worlds. It would be useless to suggest that we abandon the use of all substantives in psychology as applied to the mental life. It always *tends* to be misleading to depict the facts of mental experience in substantial terms, and that tendency can only be obviated by remembering with diligence that the substantive is a shorthand way of describing a process or the stuff of a process. The crux of the problem is not 'how we acquire knowledge,' but 'how we know.' Knowing is a function of our living, pulsating organisms. As McDougall has expressed it, we do well to describe it as 'a cognitive disposition.'

The view of knowing as a process, a function, or a disposition immediately associates it with the living organism. It is exceedingly doubtful whether philosophy has yet realized the full implications of regarding the mental life as a unity. The time has forever gone when knowing can be treated as the business of a separate 'faculty' of consciousness. The entire conscious organism in an attitude of awareness is what we understand by cognition. That awareness is usually, if not always, aroused by a situation to which the organism reacts affectively by either a pleasant or an unpleasant tone. And the attitude tends to express itself in some overt and appropriate way. Every segment of mental experience is characterized by all three phases, the cognitive, affective and conative. The analysis of our experiences into these elemests is made for theoretical purposes, but they never exist in isolation. The extent to which feeling and active elements enter into and fuse with cognitive responses is only beginning to be understood. Affective and conative dispositions not only co-operate with, but stimulate the cognitive disposition.

There is no fact more obvious in regard to organic life, both physical and mental, than development. The mental life, like the neural, unfolds from the more simple to the more complex, from the more vague to the more articulate. James' pictorial description of the infant's mind as 'a great, booming, buzzing confusion' is apparently correct. Mental development represents a growth from chaos towards order, from confusion towards differentiation and organization. In response to that growth life itself and the environment increasingly assume form, harmony, proportion, and relations. The knowing process or cognitive disposition experiences this characteristic growth, not in separation but as one phase of the total developing organism. It shares in a natural and regular organic process. Knowledge is neither something with which we are born, nor yet something thrust upon us. It is the achievement of a mental ability, unfolding in accordance with the normal development of organic processes.

The understanding of knowledge processes thus involves nothing less than a comprehension of the way or ways in which the mental life develops. Experimental researches are continually adding to the sum-total of our precise details in that field. Some differences of interpretation emerge in regard to the observed facts, but in the main there is agreement as to the direction of development.

Let us begin with the organism. What are its characteristics? On its neural side there are three: irritability or the ability to receive sensory stimulation, conductivity or the power to transmit the stimulus to the centre of the nervous system, and correlation, or the ability to organize stimuli with relation to one another and with relation to response systems. Here again we are analyzing for theoretical convenience, but the experiences are frequently so rapid and so well integrated as to appear as unities. The sensory apparatus is stimulated by the various qualities of an object, visual, auditory, tactual, etc., but in many cases we are only vaguely aware of the qualities, though we are quite definitely aware of the object. Doubtless the cognizing of an object was gradually achieved through being sensorily stimulated by its qualities, and learning to associate them in the object. But in childhood that is always very vague and confused, and increasing acquaintance with the object results in a growth in the ability to define its qualities. There is no such thing as a mythological sensation which serves as foundation for a perceptual wall and a conceptual roof in a mental structure. Logically we may find it convenient to trace a growth from sensation through perception to conception, but, actually the processes go hand in hand and inter-penetrate. The experiences of infancy and childhood are not analyzed as many of them are in more mature life. Ability to make analyses and differentiations unfolds with the growth of reflective thinking. But capacity for being stimulated by the sensory qualities inherent in objects is part of our native equipment.

The perceptual process is somewhat more complex than a bare stimulation of qualities. It is, of course, a response of the organism to a sensory stimulus. It involves however the operation of the neural functions of conduction and correlation. A person walking in the road may hear a noise behind him. He turns around and sees an approaching motor-bus, whereupon the auditory qualities are associated with

the visual qualities in the cortical centres, and a perceptual process is the result. If in the past he has learned to associate the name 'motor-bus' with an object that has stimulated similarly his auditory and visual centres, he knows this present object as a motor-bus. The perceptual process thus involves the association of a group of sensory stimuli which he has selected from the various stimuli that are competing for his attention. If the person fails to make the proper selection or the appropriate grouping of stimuli, his perception will be characterized by error. First impressions and initial perceptions are often vitiated by such errors, so that revisions are constantly necessary. How then are we to know whether our perceptual process is functioning correctly or not? It is with the growth of the analytical, differentiating ability that we are enabled to check up our results. Sometimes we find that we have made fortuitous associations in the first instance. The increasing capacity for discrimination enables man to determine what are the essential and what the accidental qualities of an object. Probably many children regard the horn as a *sine qua non* for a motor vehicle. But one day they see and hear a truck belonging to the fire department which has a gong to warn pedestrians instead of a horn. Whereupon their original percept undergoes revision in consonance with the new facts assimilated. In the early stages of human thinking magical associations are an obvious example of grouping stimuli which happened to go together in first experiences. Correcting the errors of perceptual processes is thus made possible as the exploring and discriminating functions operate in subsequent experience. Like all cognitive processes, the perceptual makes use of the trial-and-error method for revising its results.

The organism is stimulated in its sensory apparatus by the various qualities which are correlated in the cortical centres, and associated with certain objects. Thus these sensory qualities that we experience come to function as signs of the presence of objects. The experience leads us to perceive an object rather than merely sense a quality. In truth we never sense qualities apart from objects which we regard as stimulating the experience. Sometimes the sensory quality or qualities may have been so associated in past experience as to suggest another more remote object. But in any case the sensory qualities serve as a sign-language bearing meanings to us with reference to objects either present or remote.

The form of our perceptual content is not determined solely by sensory experiences. Past experience and education play their part in determining the form it takes. If one were to see a motor-bus for the first time, he would perhaps have had experiences of buses drawn by horses, and of motor vehicles of other sorts which he would be able to synthesize in a new percept. That process by which the newly presented object is related to or associated with the antecedent content of consciousness is sometimes called apperception. Every perceptual act involves a synthesis of the familiar and the novel. It integrates elements furnished in apperception with elements experienced in a sensory way. If the object is one with which we are familiar from past experience, the character of one's memories determine the manner of synthesis and the character of the perception. The cognition becomes a re-cognition.

When I see a motor-bus, how do I know that it is a motor-bus? The cognitive process is apperceptual as just described. It involves the sensing of the qualities of a present object. And it includes the memory of similar objects. But those other motor-buses are not present to sense that I may compare the present with the past. My memory takes the form of an image, and how can one compare a sensory image with a memory image? It is certainly not so simple as the associationists supposed. For again we are reminded that the terms 'image' and 'imagery' are equally abstract as 'sensation' and 'perception.' Imagining is a process by which we are mentally and more or less vaguely aware of experiences, qualities or objects not present. The question as to whether thinking is possible without images is one on which psychologists are not agreed. The divergence of opinion is partly due to interpretation and partly to definition. A good deal of experimental work has been conducted in the past few years on this problem, and a number of psychologists claim that introspections sometimes disclose thinking that has no imagery, no dependence on sensation. Others for whom images constitute the stuff of the thought processes would interpret the same data differently. Recently I read an introspective account of this kind in which the subject disclaimed having any images, yet recalled the 'location' of the object with reference to others. Once more probably much confusion is due to the survival of the habit of regarding imagery as an entity rather than a process in which we utilize past perceptual experiences for dealing with present situations.

It was remarked that sensory qualities come to function in experience as signs of the presence of objects. This process by which a quality or a thing serves as a sign or a symbol to us is the meaning of meaning. To be aware of a meaning is to comprehend something of the relations that an object sustains to other objects. Meanings have no substantial existence, and no end of confusion has been experienced by regarding them as if they had. They are not discoverable or attainable entities, but are facts of the mental life, all of which is more comparable to a stream than a structure. Meaning is an activity of consciousness, difficult of analysis because it is always in advance of our attempt to penetrate it. It indicates our attitude or reaction to an object, and changes the moment we begin to comprehend it, because then our attitude and not the object occupies the focus of attention.

The development of meanings is characterized by growth towards definiteness and discrimination. It is synonymous with understanding the function of an object in a particular situation. Obviously with the evolution of the organism from infancy to maturity this process involves diminishing obscurity and increasing definiteness. It is marked by growing stability and coherency with other meanings, as a consequence of which we are enabled to respond more appropriately to various situations. Meanings that are in any degree stabilized and made coherent with other meanings enable us to anticipate typical consequences and act accordingly. Complete elimination of indefiniteness and obscurity is seldom if ever possible, but development is towards such a goal. The more we are able to stabilize and make coherent our meanings the better are we able to systematize and organize them for

reactions to future situations. Thus the function of signifying that characterizes our meanings is gradually widened so as to take in not only single objects but classes of objects. Classification and scientific definition is thus the culmination of the meaning process.

The significance of meaning reactions is with reference to the future as well as the past. The meaning, as observed already, gives to an object a symbolic value. Otherwise things would be, if such an experience can be imagined, merely blind stimuli. But when a meaning is associated with an object, it is made available for use in new situations. Problematic situations mean that our knowledge is incomplete, and that we desire to know what would be the result if we followed a particular course of action. The meanings associated with objects in previous experiences are the instruments whereby we attempt to solve our problems. If the meaning has been generalized in what logicians call a concept, it is capable of a wider application to such problematic situations, because it has been in the generalizing process liberated from its accidental features. Thus the things that we do and are able to do with our meanings indicate our interest in giving them adequate and appropriate expression. The union of the general and the particular meanings, or of conceptual and perceptual knowledge can only be in concrete, active situations. The application of a scientific hypothesis to a specific situation is an illustration of the way in which a generalized meaning becomes united to a particular situation, thereby giving significance to the new, and recognizing it as a specific embodiment of the conceptualized meaning.

One characteristic tendency of the organism is to act. That tendency expresses itself in a number of characteristic attitudes or dispositions to act in particular ways. The reason that we assume these attitudes or characteristic dispositions to activity is to be found in the interpretations we have made in regard to objects towards which we have reacted in the past. Our meanings are thus anticipatory in function. They symbolize objects and relations, and these symbols enable us to meet similar situations. People assume different attitudes towards the same object, or the same person assumes different attitudes at different times because of the different meanings associated with the object. Our attitudes thus indicate a variety of possible meanings towards an object, or in other words a variety in the ways in which cognitive reactions may take place. The attitude is the mental set of the individual that furnishes the clue to his readiness to meet a particular situation in a characteristic way. It is determined largely by the bonds that have been formed in the past between situations and responses. But it operates not only as a determinant of activities, but of knowledge. Attitudes have cognitive as well as conative significance.

An attitude is equivalent to a person's mental set. It is thus an indication of his interests, of his felt needs and the way he proposes to satisfy them. Our contacts with external objects result in affectively toned experiences, some of them agreeable and some disagreeable. These affective reactions are indicative of needs to orient ourselves to the situation as presented. Our equipment includes a core of interests, things that attract or repel us, another core of knowledge fragments

gathered in the past, and our association of these with the present situation results in an orientation attitude. It may mean an addition to our cognitive equipment or at least an adjustment of it, as well as a tendency to respond to the situation conatively. Thus every occasion when we assume an attitude that is in any degree cognitive, we do so because we are persons interacting with our environments which presents specific stimuli to the knowing self. All attitudes, all cognitive responses are in some sense biologically purposive.

The attitudes possible to a person are numerous, and may include the religious attitude, the aesthetic, the scientific, the parental, the combative, the pacifist, the play, the gregarious, etc. None of them is to be identified with a single act, but rather with a whole body of actions which indicate one's tendencies to act characteristically towards some environmental situation in which one is either positively or negatively interested. A New York architect described the pyramids to his friends as 'very large buildings, badly out of repair.' Napoleon drew up his army beneath their shadow, and challenged his men, 'Soldiers of France, forty centuries are looking down upon you.' The same environment carried different meanings, different attitudes, different orientations.

Because an attitude is a factor of personal experience, an immense variety of attitudes is possible. Each of them has cognitive significance because knowledge is experienced in our orientations. It is not possible to single out a specifically cognitive attitude in discrimination from an affective or a conative. Like all elements of the mental life, attitudes participate in all of these primordial factors. It is an incomplete view of the character of our attitudes to suppose, for example, that knowledge is only possible when one assumes the scientific attitude. It is partly due to regarding knowledge as an entity rather than an activity. Cognitive factors enter into all personal attitudes, the religious as well as the scientific, the play attitude as well as the work attitude, the appreciative as well as the critical.

The environment includes some factors that are inorganic and some that are organic. Personal attitudes are sometimes classified on the basis of the discrimination which we naturally make between the non-living and the living. Towards the former our attitudes are frequently mechanical; towards the latter they are social. If the individual be an animist he may regard an inorganic object as the abode of a spirit and then take a social attitude to it. In regard to facts observed and assembled about persons, one may assume a mechanical attitude, but towards the persons themselves his attitude is necessarily social. The attitude assumed towards inorganic objects is called mechanical, because they are objects which have no life or power of self-motion, but which we may move and manipulate in accordance with our desires and purposes. If we treat a living object in a similar way, our attitude is mechanical in a derived or secondary sense. The social attitude regards the other of the relationship as a person, like ourselves more or less, and not a thing incapable of self-determination.

It is perfectly obvious that there are some elements that enter into a mechanical attitude quite impossible in a social attitude. Things may be regarded and manipulated as means to ends; persons ought to be regarded as ends in themselves,

Things are inert; persons possess the power of motion and resistance. Things are unsusceptible to irritation and feeling; persons are susceptible to both. Things are unconscious; persons are not only conscious, but self-conscious. Things possess no power of self-determined responses to stimuli; persons may choose between alternative ways of responding to a stimulus. Such are some of the discriminations that form the background of our differentiated attitudes, the mechanical being an attitude towards an object regarded as a thing and the social an attitude towards an object treated as a person.

Can we describe the types of behaviour that result from these two types of attitude? When our attitude is of the mechanical type it expresses itself in such tendencies as physical manipulating, measuring in various ways, making calculations with and with respect to the object, taking the object apart if it is feasible and reconstructing it in order to examine the relations between parts and the whole, subjecting it to various conditions in the laboratory and observing the results, and so forth. On the other hand the social attitudes are characterized by the tendency to regard oneself as a member of a group or groups rather than as an isolated individual, the tendency to seek for mutual support from like persons, the tendency to seek social contacts for communion and sympathy and to escape from loneliness, the desire to share one's experiences, all forms of herding or gregariousness. These socializing tendencies are just as surely the outcome of instinctive and impulsive human nature as are the mechanizing tendencies. Nothing is more obvious in regard to the nature of personality than its fundamentally social character. The individual is born as a member of society. He is much more the product than the creator of society. Self-consciousness is a social self-consciousness. Sociologists have described it as 'the we-feeling.' The unfolding of personality is characterized by a process of learning consciously or unconsciously to think, feel and act in co-operation with other persons, though that does not mean being cast in identical moulds. It involves an increasing sense of shared privileges, of social responsibility and control, including control of oneself, and of enrichment in personal character.

If we revert to our perceptual experiences we shall find this differentiation appearing. Some of these responses, like those including relations of a spatial or temporal character, involve cognitions of measurable and mechanically manipulable objects. One of the observations made in the testing of intelligence is that there is a growth in the accuracy with which children are able to perceive the spatial and temporal qualities of objects. There is in normal children an observable progress away from vagueness towards definiteness, and distinctness. On the other hand there are many facts to which we attribute social meanings about which we get our information through perceptual processes. We learn to interpret the significance of social reactions such as grimaces, gestures and sounds by social perception. The social reactions of other people such as affection, sympathy, hatred and envy are known to us through perception of persons acting in characteristic ways. We learn through experience that various social attitudes are expressed by typical gestures and grimaces, though of course man has the ability of 'acting a part' at times. Social perception also takes the form at times of sharing in other peoples' responses,

a fact which some psychologists would interpret as the operation of a group mind. However it be explained, it is frequently true that we see with the eyes of the group, and hear with its ears, rather than reacting individualistically. Our prejudices and pridilections, our attitudes and activities, our appreciations and animadversions are ours because we belong to groups and share in their responses.

We have observed that some of our meanings are particular, and some are general. When we are aware of an object as possessing certain essential features, and are able in our thinking to strip it of its accidentals, we classify it. The processes of knowing include the mental operation of assembling the common factors of various experiences, and incorporating them in concepts or generalized meanings. This is done whether the factors of experience be of mechanical or social types. The consciousness of meanings, the utilization of symbols, the formation of abstractions, the enrichment and revision of concepts and all such cognitive processes operate psychologically in the same fashion whether we are dealing with social or non-social phases of experience. The principle of development functions in two main directions, namely in the formation of new meanings of the generalized type, and in the revision of those already in use. Our knowledge reactions are carried on by processes of comparison, discrimination, generalizing and classifying whereby new meanings spring out of old ones, and old ones are clarified. Such is the way in which knowledge grows from more to more, and it makes no difference psychologically whether we are using distance, duration, shape, weight, plasticity or such non-social meanings, or co-operation, justice, sympathy, loyalty, rivalry, competition or such social meanings.

The knowing process is thus a process in which trial-and-error learning operates all along the line. Experimental work has shown that learning is a process involving a series of trials, often with repeated failures and deferred success in the gradual attainment of the desired end. The learning of animals has been observed to be distinctly of that type, and observations of the learning of children lead to the same conclusion. There is no mechanism in the human organism that can guarantee initial success in any kind of learning. We muddle our way to successful achievement just as truly in cognitive reactions as in gaining control of our muscles for operations requiring skill. The use of the hypothesis in scientific explanation is a good illustration in point. It is always formulated provisionally, and frequently it has to be amended to account for facts not reckoned with in the initial attempt to explain, while at times it has to be totally discarded in the light of subsequent observations. While it is in the process of testing we call it a 'working' hypothesis, a phase which is itself a recognition of the way in which scientific knowledge is built up. Nothing could illustrate more clearly that knowledge is a process, not an entity. Here again our observations are equally applicable in the social and mechanical spheres, in the world of people and the world of things. There is the possible exception that a man is not always as ready to revise his estimate of a person or group of persons as he is of a thing or class of things. The possibility of persons 'acting parts' that are different to their habitual dispositions and characters results sometimes in greater delay in successfully knowing them. Even inanimate objects

bewilder us at times through presenting aspects that are exceptional and unfamiliar. In the normal cognitive reactions, however, whether applied to social or non-social situations, the trial-and-error method is the way to the attainment of success.

Madras

A. S. Woodburne.

A Study in Superstition

Not long ago, an acquaintance of mine showed me a cutting from a daily newspaper, in which it was stated that the inhabitants of a certain county in England had made a representation to their municipal authorities to remove the number 13 from the doors of their houses, as it boded ill-luck to them. My friend was inclined to treat the whole affair as a huge joke, but it set me thinking. If superstition played such a great part in a man's life, then certainly it was a subject worth studying. It looks as though the average man of to-day has fallen into the habit of talking about superstition with a sneer. This is not a healthy habit. It shows that a cheap kind of critical spirit has robbed him of the desire for true knowledge. An eminent author declared recently that no intelligent and perfectly balanced person is superstitious. If this be true, the world for the most part, must be composed of unbalanced, unintelligent beings, for superstition is a universal phenomenon. Superstitious beliefs are to be found in all countries of the world and I have yet to meet a man who would deny under rigid cross-examination that he had a few superstitions tucked away among his inhibitions. The mere fact that it does not conform to certain rational standards that we have set up should not prevent us from knowing all about a subject of such human and world-wide interest. Fortunately however, with the coming into prominence of the psychological method of looking at things such a narrow and one-sided view of superstition is passing away. For any criticism we may level against superstition should not affect the fundamental psychical facts underlying the phenomenon. Superstitious ideas and experiences are inextricably mingled with ideas and experiences of ordinary every-day life and are therefore necessarily coloured by them. It is one of the tasks of psychology to distinguish the superstition dynamic under all forms of thought through which it operates. A reasonable and sympathetic study of the various superstitions of mankind is only possible in an individual or age which feels no constraining call to suppress or obliterate any particular body of facts in our experience.

Although one may not be 'exactly superstitious' it is to one's own advantage to know something about it. You cannot ride rough-shod over your friends' pet beliefs and yet be popular. A gentleman has been sometimes defined as one who does not wound others' feelings. If we wish to live up to this ideal we must respect other peoples' superstitions, for some do really feel very much grieved if these are treated with contempt. The other day I nearly got a black-eye when I asked a friend of mine who was starting out on a journey, where he was going, (a question regarded as inauspicious by many). It was then that I realized that although superstitions may be airy nothings, a superstitious man is a force with which to reckon, especially people like my friend who weighs about twelve stones. Recently I read in the papers about an American reporter who nearly lost his job because he applauded a song during rehearsal, a thing banned according to stage superstition. So we may conclude that it pays to know something about superstition.

Are we less superstitious than our fore-fathers? I do not think we are, although we certainly seem to take more pains than they did to hide this fact. This indeed seems to be one of the chief characteristics of superstition. You will find a great many who scoff at omens openly as 'bunk,' while they embrace them in private. Unlike in his pleasures, man is a hypocrite in his beliefs and superstitions.

Why do men still continue to be superstitious in spite of the enormous growth of rationalism that has characterized the progress of our modern civilization. Common-sense, education and even greatness has failed to displace this quality from human nature. Common-sense ought to tell a man that sneezing cannot have any effect whatever on his future life, but it does not seem to do so. I know quite a lot of people—shrewd and able men in other walks of life—who would grow perfectly frantic with anger if you happened to sneeze while they were discussing some future plan of action. Or again take the belief quite common in many parts of the world, that Friday is an unlucky day. This superstition has absolutely no business to thrive in American soil at all, if knowledge and history mean anything. But it does exist there in as deep-rooted a manner as anywhere. An American writer on the subject has taken the trouble to collect a number of dates from American history to prove that Friday has been its luckiest day. Here they are:

Friday, October 12, 1492. Columbus discovered America.
,, September 11, 1609. The 'Half Moon' entered New York Bay.
,, February 22, 1732. George Washington was born.
,, June 16, 1775. Bunker Hill was fortified.
,, October 17, 1777. Burgoyne surrendered Saratoga.
,, October 19, 1781. Lord Cornwallis surrendered York Town.

Superstition has a knack of persisting in spite of facts and figures. Even greatness has failed to dispel this quality from man. Both Julius Cæsar and Napoleon Bonaparte were notoriously superstitious and it is rumoured that President Coolidge wets his baits before he casts for pickerel.

One of the reasons for this profound grip that superstition has over human nature is to be sought in the great influence that our environment has upon us in moulding character. We are, to a certain extent, what our surroundings make us. From our childhood we are taught to be superstitious. We are asked to do certain things because they bring good luck, and not to do some others because they forbode evil. We are cuffed for saying inauspicious things, and praised if we understand and act up to the established superstitions of our family or community. The family circle, the child's most admirable training ground does its best to form in him the habit of superstition; and once the habit is formed, like all habits, it is very difficult to get rid of it. Even if education and enlightenment shake our faith in such beliefs, we still stick to them because any attempt to violate them is followed by an uncomfortable feeling closely allied to what is called the pricking of conscience. We are haunted by a vague sense of coming disaster. To avoid all this trouble we hold fast to superstition in spite of our better judgement. For the average man is an easy-going animal with a singular distaste for fighting moral battles. This feeling of uncomfortableness which troubles a man when he sets at naught some well-

recognized superstition, seems to be one of the chief factors which has helped to perpetuate superstition among mankind. It may be ultimately traced to a kind of moral cowardice.

That which differentiates man from the lower animals of creation, is often said to be his rationality. True as this may be, it is only one side of the picture. There seems to be in him, an irrational element also. While the animal is wholly irrational, the average man blends in him both the qualities of Rationality and irrationality. Often we show a singular distaste to reason out things; we like to stick to certain a priori opinions. It makes us feel very comfortable to do a thing because 'it is good,' though we are quite unable to find the reason for its goodness. It brings into play an element of mystery which greatly appeals to our imagination. I have come across people who, after making a hopeless mess of a job entrusted to them solely through their incapacity, feel perfectly blameless because they did it on a certain lucky day, at a very auspicious hour. They talked about the affair with the air of men who did their very best. Such beliefs put a premium on incapacity and as such are very attractive. Mankind simply loves to cling to certain 'truths' that have come through the ages, even though they may be quite unreasonable and this love, forms an admirable soil for the growth of the plants of orthodoxy and superstition.

Do superstitious beliefs ever come true? Sometimes they do and that too in a most remarkable way. You may call it coincidence or whatever you like, but the facts are there, and we cannot afford to wink at them. As an illustration let me refer to some of the incidents that took place during the recent excavations at the Luxor Valley. When the body of Tutankhamen was revealed to those who entered his tomb a mark was found on his face. The mark left by the fatal mosquito bite on the face of the late Earl of Carnavon was exactly in the same position. This remarkable coincidence is one of the many incidents in connection with the Luxor operations that has given colour to the claims of the superstitious who foretold all kinds of disasters for those who tampered with the tombs of the Pharoahs. The subsequent death of Mr. Benedite the distinguished French Archaelogist and Egyptologist attached to the Department of Antiquities at Cairo was further encouragement to those who believed in the fabled curse. Mr. Benedite who was directly connected with the excavations carried out by the late Lord Carnavon and Mr. Howard Carter at Luxor when the tomb of Tutankhamen was first opened, was the fifth archaeologist to die whilst the work was in progress. Speaking on the subject Mr. Arthur Weigall the famous Egyptologist says, 'while I cannot exactly say that I subscribe in believing in the efficacy of such curses, I must admit that some very strange things have happened in connection with the Luxor excavations. For example there was the case of Mr. Howard Carter's canary which he kept in his house. On the very day in which the tomb of Tutenkhamen was laid bare, a cobra than which there is no rarer snake in Egypt during winter months, got into the house and swallowed the bird. Now it is a fact that the cobra was the symbol of royalty in ancient Egypt. Each Pharoah wore it on his forehead and head-dress to show his power to strike down his enemies. Lovers of the mysterious naturally interpreted this incident as the killing of the peace of the English Home by the Royal cobra'.

Another way in which superstitions do come true may happily be explained away more easily. A superstitious belief has such a great hold on a man, that the moment he does anything which according to that belief forbodes evil, panic takes hold of him and colours his future action. For example, let us take the belief that the breaking of a glass brings bad luck. The man who believes in this, is entirely upset, if by chance he happens to break a looking-glass or any such object, particularly, if he has high-strung nerves. Neither his physical nor mental powers are at their best then, and naturally he makes a muddle of the next job he undertakes. Our beliefs make or mar us sometimes, and superstitious beliefs are no exceptions to the rule.

A few ways in which superstitious ideas may have originated may now be suggested. The imperfect application of the causal category seems to be responsible for some superstitions. Sometimes it is taken for granted that two events which follow each other in time are causally connected, and if the event which came second is of an unfortunate character, the cause for it is sought in the event which preceded it. As an example let us take the belief that it is unlucky to walk under a ladder. A, who walked under a ladder might have got a bucket of paint on his head or B, an influential member of a little village community, might have had a wire saying his son died, immediately after emerging from under a ladder. Such mishaps being of a dramatic character are brought well before the public eye. The public seek for the cause of the catastrophe in the event that immediately preceded it, i.e., walking under a ladder, and the belief that it is unlucky to walk under ladders is firmly established and is handed down to generations. Again imperfect deduction from particulars might account for some other superstitions. Because A, B, and C, had each a mishap on their journey after a black cat crossed their path, the conclusion is at once jumped to that it is unlucky to meet a black cat on the way,

Superstition is closely allied to magic and many superstitious ideas can be traced back to man's primitive days when magic held the field. The body of superstitions connected with the 'evil eye' is a case in point. In primitive society the stranger who came from outside was a mysterious figure who was invested with all sorts of occult powers. He was a live wire and had an uncanny capacity for working harm. Hence the zealous guarding of children and precious objects from curious and strange eyes, because it forbodes evil so to expose them. The magical idea that some people can harm objects by merely *willing* it, might also have helped to strengthen superstitions of this sort. A Swedish mother places books under the head of a new-born infant so that it may be quick at learning to read. Money is placed in its first bath to guarantee its wealth in future. In superstitions of this sort again the hand of magic may be seen. Here it is taken for granted that when two things come into contact, the one has the power of transmitting its distinguishing qualities to the other (contagious magic).

Some superstitions seem to have been deliberately invented to protect property. In this respect they are not very much unlike 'taboos.' When some object is in constant danger of being stolen and when there is no efficient way of adequately protecting it, it is often found convenient to make a superstition or two circle round the object.

It is affirmed that a curse—usually a horrible one—will fall on whoever dares to touch it. The instinct of self-protection being strong in man, he is sure to keep his hands off the same, even though greed may impel him to steal it. Mr. Arthur Weigall the famous Egyptologist, who has made a special study of Egyptian superstitions in general and of Tutankhamen's reign in particular, is of the opinion that the curses of a superstitious nature attached to the tombs of the kings at Luxor, were primarily intended to terrify the tomb robbers of the period who might smash up the mummy in searching for jewelry or otherwise damage the tomb.

Perhaps some superstitions were invented by the elders of a tribe or community with a view of sowing into the rank and file, the germs of a moral code. A moral maxim dry and bald has a very little chance of having a popular following, but if the same thing is put in terms of profit and loss it is more appealing and stands a better chance of success. Hence the superstition that it is unlucky to steal money from a church or temple. Perhaps such beliefs are not conducive to the highest kind of morality but still a beginning is made in the right direction.

No belief which we now regard as a superstition ever originated as such. Many of those beliefs which we now regard as superstitious were originally, responses to felt needs in a past age. Gradually owing to the operation of many influences, the need itself ceased to be felt, but the response continued. *Some of our superstitions are mere survivals.* Says Tylor in his *Primitive Culture*, 'When a custom, an act, or an opinion is firmly started in the world, disturbing elements may long affect it so lightly that it may keep its course from generation to generation as a stream once settled in its bed may flow on for ages. An idea the meaning of which has perished for ages may continue to exist simply because it has existed.' As an example may be mentioned the belief common in India that it is unlucky to shake one's legs while sitting on a cot. The origin of this idea may be traced back to the days when our ancestors were mostly farmers and agriculturalists. It was common then to keep under bed-steads vessels containing milk, which were sure to be upset if people sitting on these bed-steads were not careful. They were asked not to shake their legs purely as a measure of precaution. When with the changing of times separate rooms and store-houses were built for the produce of the dairy, such a precautionary measure lost all its significance, but it still persisted and has been handed down to us.

Much valuable information as to the nature of superstition can be had, if each of us by means of an introspective study finds out the factors which from our very childhood have gone to give us a superstition complex; and a comparative study can be beneficially made of the results thus obtained. Here is one such analysis of the superstition complex made by Mr. H. I. Philips during the course of an interesting article on 'Omens' in a recent issue of the *American Magazine*. 'The first superstition that I remember distinctly' says he 'came to me when I was seven or eight years old in the form of a rhyme quoted by a boy who was with me. We were walking through a street paved with old-fashioned huge, square flag-stones, when this boy cautioned me never to step on cracks. As he put it,

If you step upon a crack
You will break your mother's back.

This struck me as a rather horrifying suggestion and I thereafter stepped over all side-walk cracks. My parents were but mildly superstitious. They believed in a good many old-fashioned weather-portents such as, ' Rain before seven, clear before eleven ' and ' A curdled sky never leaves the ground dry.' I had a grandmother who used to interpret events from the formation of leaves at the bottom of a cup of tea and another who thought that there was some particularly medicinal properties in a handful of April-snow. But my own superstition complex must go back beyond even this time. I had some ansectors among the first Massachussets colonists up amid Salem who were a superstitious lot and my susceptibility to superstitions may have come from them. The belief that the evil eye can be averted by crossing the fingers and that it is bad luck to walk under a ladder, I heard as a small boy and looking back it seems to me, my early boyhood playmates had more than their reasonable quota of superstition. The horse-shoe superstition was then the outstanding one in this country and as horse-shoes were then plentiful I saw to it that I had a big collection. I never questioned the authority of omens. They seemed good things to have around and I just appropriated them.'

Is there any value in superstition ? At first sight such a question appears to be absurd, but such an appearance of absurdity is only superficial. For let us remember the fact that an idea may have worth and subsequently pass into the category of superstitions. As I have already observed, some ideas which we now regard as superstitious seem to have been originally made with a view to instilling into some men, the germs of a moral code; and if this end was acheived, then they have certainly played a valuable part. It is not altogether impossible to conceive of certain types of thought which we now ban as superstitious, as playing the part of an ethical fly-wheel of society, at a certain stage in man's moral evolution. Be this as it may, a study of superstition in all its aspects seems to be very interesting, provided we undertake such a study with an unbiassed mind.

S. P. ADINARAYANIAH.

MADRAS.

The Validity of Religious Knowledge from the Idealistic Point of View

It has been said that as art is make-believe so religion is belief, and the falsity of the former is illusion, whereas if the latter is false it is delusion. Is religion false, are we under a delusion when we believe ? How shall we know ? Shall we sit back and hum 'Some day we'll understand ? ' In the day when the trumpets shall sound we may find out whether it was all a fake, an idle imagination or whether there is really something in it. Is that sufficient assurance for the religious man ? Or do we run only a coward's risk, thinking to believe will never do any harm and may be effective in the end. Assuredly, such are not the attitudes of the religious consciousness. The man who believes has faith not in a hazy venture whose reality he doubts but professes only as a safety measure which may be unnecessary. The religious man is convinced, he is a man of conviction, more certain of the spiritual ideals in which he places his trust than of all else in the world. In fact all else exists only by virtue of the spiritual and is dependent thereon.

Does that mean that the religious man has proof of that in which he believes ? Our answer must depend on the meaning of proof. To demonstrate by syllogism in Aristotle's way is certainly impossible. Nor can we hope to mix spirits in a laboratory and produce God. The demonstrations science requires are not possible of religious knowledge. And yet we must insist it is true. In fact we would go so far as to say it is the ground and basis for all truth and thus every truth is a demonstration of religious truth. 'The heavens tell His glory,' 'All earth testifies of his goodness,' these are true sayings. The question is how are religious truths shown to be valid. Validity, we know, is always the problem of philosophy. We may speak of the history of religious doctrines and ideas, of their psychological or social character and we are still in the realm of science. But when we ask for the basis of these ideas in reality we enter upon a metaphysical problem. That means that we are faced not only with this problem but with other issues as well. To answer the first we must ask also about the general nature of reality, about the place of the religious consciousness in life, it's claim to a hearing, whether there be degrees of reality and the principle on which the scale is organized. It is the answer of idealism to these questions that we wish to consider here.

Unfortunately, for many idealism has come to be defined in terms of the psychological idea. The Berkeleyan interpretation that only ideas in my head are real and have no objectivity has been taken to be the core of the idealistic philosophy. However, this is a gross misunderstanding. What idealism stands for is rather this: that Reality is a system in which everything that is has its place, that this Reality being all-inclusive is not to be explained in terms of the lowest and simplest forms of existence but in terms of the highest and most inclusive, and

these highest are taken to be our judgements of value, beauty, goodness and truth. In other words the nature of the ultimately real is to be found in what we recognize as greatest and best in our own experience, or if we prefer the language of evolution, to know the universe we have to read back the nature of the latest consequent into the remotest antecedent, the principle of the whole embraces in its evolution every phase of the actual. The lower phases are not independent facts but are abstract aspects of the whole, which is expressible only in terms of self-conscious experience. Idealism means essentially the interpretation of the world according to a scale of values, according to Plato's Idea of the Good or Bosanquet's Principle of Value. Ideals are often supposed to be subjective but their objectivity is the very platform of idealism. Martineau has forcefully expressed this objectivity in the following quotation : 'Amid all the sickly talk about "ideals" which has become the commonplace of our age, it is well to remember that, so long as they are a mere self-painting of the yearning spirit, they have no more solidarity or steadiness than floating air-bubbles, gay in the sunshine and broken by the passing wind. The very gate of entrance to religion is the discovery that your gleaming ideal is the everlasting Real, no transient brush of a fancied angel's wing, but the abiding presence and persuasion of the Soul of souls: short of this there is *no object* given you.'[1] Objectivity here has a special meaning. It does not mean what is outside of men but it means what is ultimately real, what is basic to all that is, in popular language, what makes the world go round. It means that values are inextricably bound up with the world of existence. They are a wider life in which we share, in which all things share. That values should perish and facts go on, that values have no relation to facts is inconceivable. The thought of such a situation is on a par with an intellectual contradiction. To a true idealism ' values are an intense vision of the foundations on which the universe is built.' Values as we know them in the life of man are the universe become conscious, reality as it knows itself. A few references from some arch-idealists will serve to substantiate this as the idealistic position. The vital contention of Bradley's *Appearance and Reality* is the positive doctrine that reality is revealed in the system of its appearances and that the standards of better and higher which we apply are themselves based on the nature of reality and dictated by it.[2] Bosanquet says: 'The Absolute is not merely an intellectually coherent whole; it is perfect in every respect. We must believe that reality satisfies our whole being. Our main wants—for truth and life and for beauty and goodness must all find satisfaction.'[3] And again: 'Love, beauty, truth, in these our unity is solid and plain—our unity with God and with the whole of being.'[4] Or we may choose the words of Seth Pringle-Pattison : 'One thing is plain. The standard or principle of value must be found in the nature of the system as a whole. Judgements of value, in other words, are not to be taken, like the intuitions of an older philosophy, as so many detached and mutually independent pronouncements of one faculty or

[1] Martineau, *Study of Religion*, Vol. I, p. 13.
[2] Bradley, *Appearance and Reality*, p. 551.
[3] Bosanquet, *Principle of Individuality and Value*, p. 268.
[4] Bosanquet, *What Religion Is*, p. 28.

another upon particular features or aspects of the world. They represent rather so many parts of one fundamental judgement in which the nature of reality, as exhibited in the system, may be said to affirm itself. Every particular judgement depends for its ultimate sanction on the recognition of its object as a contributory element to this inclusive whole.'[1]

From this brief account of the general nature of reality as seen through idealism it might seem as though the idealist merely states a thesis without sufficient basis for what he claims. In defence we may say that every philosophy begins with some hypothesis regarded as basic and our criticism must be based not on the fact that it is an hypothesis but on its adequacy to explain the facts of experience. Since any philosophy must adopt some first principle the value of the philosophy will depend on the extent to which this principle accounts for all of life. However, there is some argument to substantiate the general position of idealism. This is the argument from the rationality of the Real. If this is doubted we are reduced to complete scepticism, and since this is impossible except for the totally dumb, we must if we are to philosophize at all maintain that reality is intelligible. Thus the hypothesis of idealism is one which you cannot deny without assuming. Further, intelligibility depends on the absolute judgement of value. For how could we argue, how could we convince ourselves of the truth of anything, unless Reality affirmed through us its inmost nature? Similarly how could we feel the urge of goodness and the appeal of beauty except we recognized them as more than finite, as the fundamental reality seeking expression through us? It must be admitted that we do feel the unrivalled urge and appeal of these values. Should we cast that aside and fall in line with the sceptics who mistrust any experience? Or do we take it for what it is worth and seek for it a place in a rational scheme of the universe? Idealism prefers to trust experience and test its worth. It is within the scope of this paper particularly to examine its trust and test of the religious experience. The question is: does idealism justify the convictions of the religious man?

To answer we must ask first what religious convictions are. A man might be convinced that angels exist, that they are able to dance on the point of a needle, or that hell is a burning pot of fire, but are these essentially religious convictions? Such beliefs have often been considered essentially religious; still a very irreligious man might hold to them tenaciously. The religious man's account of his experience is often overlaid with accretions and survivals of custom and belief. Superstitions often continue with their roots twined about our value consciousness. It is a sad fact, since it is the mixture of such beliefs which clash with our more scientific conclusions that has brought opprobrium upon the name of religion. To-day we cannot separate life into distinct compartments as Pascal did and find peace in the assertion that 'the heart has its reasons of which the reason knows nothing.' Religion does not arise as a protest against reason. It is faith which is contrasted *not* with knowledge but with sight. All the resources of knowledge may contribute to faith. But faith is contrasted with sight because it is essential to it that we rise into another world while remaining here. That other world is the world of value

[1] Seth Pringle-Pattison, *The Idea of God*, p. 223.

which has its roots not in a separate part of our nature, but issues from our reasonable life and is the informing principle of a coherent theory of reality.

This much seems then, to be clear, that it is not an unreasonable faith to which the religious man clings. It must be admitted that the task of establishing the validity of all religious beliefs is a hopeless one. Many are inconsistent with one another, and are, besides, inconsistent with knowledge which we possess. But the same is true of scientific beliefs and does not condemn religion as such. Both religion and science must submit to the acid test and admit that their postulates can only be valid when they are presented in a form which is consistent with the presuppositions on which the total body of experience rests. We can try to verify religious ideas by showing that they enter into harmonious relations with the other elements in the body of knowledge. They then share in the strength of a structure the parts of which mutually support one another. Failure to cohere, when it amounts to positive inconsistency is a sign of error.

But there is a sense in which we may speak of religious knowledge without meaning this or that particular belief. We may refer to the universal presuppositions of all religious experience. And then religious knowledge may mean belief in the supremacy of spirit. In religion a spiritual being is absorbed in or surrendered to a greater Spirit. Religion regards experience and treats things from the standpoint of value. To know, hold converse with, and enjoy the ultimate Good, is the chief end of spiritual endeavor. And it is the certainty associated with the reality of the Good, the positive belief in the objectivity of all values that constitutes religious knowledge. Love, beauty, truth, the eternal verity of these, is the truth on which religion stakes its all.

What, now, does idealism say of this certainty? Is the religious consciousness an adventure in a dreamy cuckoo-land, or is it justified in maintaining its beliefs? The latter is the truth of the matter. In fact it would seem that the religious man is always a true idealist though he does not know it, and the idealist is truly religious. Galloway makes the following statement: 'Idealism is the form of philosophical thinking which leads most readily to a philosophy of religion, inasmuch as mind or spirit is of primary value both for idealism and religion.'[1] We have noted the insistence of idealism on the objectivity of values and how impossible they would be to a self-contained finite entity. Framing an ideal and pursuing it means the presence of the infinite in the finite experience. The finite is recognized as existing only in and through the infinite. It is the nature of the infinite to express itself in the finite. The union of these two constitutes reality. Hence the ideal is precisely the most real thing in the world; and those ranges of our experience such as religion, which are specifically concerned with the ideal may be accepted as the best interpretations we have of the true nature of reality. Religious satisfactions means truth. It means unity with God, man, and nature. The religious spirit is one with the Spirit which is the whole and the Good. Religious knowledge is thus the knowledge of the ultimately real.

Galloway, *Philosophy of Religion*, p. 44.

But there is one thing more which requires consideration. It is true according to idealism that religious knowledge is knowledge of the highest that *can be known* but it is not knowledge of the highest that there is. Religion as the pursuit of values construes its object as a Person, for only the personal life makes values real. Hence the validity of the postulate of a Divine Personality becomes a problem for the philosophy of religion. Idealists such as Bradley admit the necessity of belief in Divine Personality for the religious consciousness but in the scales of degree of truth and reality Personality is not ultimate. The final reality remains forever unknown for to know it one must be it, and then the finite self disappears. But religion which must be practical insists on the finite self. It is essentially a relational experience in which both parties of the relation are regarded as real. Sometimes in its more mystical tendencies religion seems to break away from the relational form and there is an experience of absorption in God, an experience in which only God is real. But there is another side which religion requires. It requires the assurance that God knows and is interested in the individual, that he sees the trials and triumphs of Jennie Smith who works daily for the support of her sick and aged mother. It is this element of individual reality which idealism cannot sanction as *the* truth. Nevertheless idealism assures us that it is not religion alone which is thus inadequate to approach the eternally real. Science, philosophy, all thought, every human experience must be touched with scepticism, for they are all vitiated by distinctions which cannot hold of the Absolute. The Infinite is a Beyond that the finite individual can never quite attain. What man can do is to approach the Infinite in a measure. He attains a degree of truth in his experiences and a higher degree in some than in others according as the experience is more inclusive and takes in more of the Infinite. And here we are reassured again of the high place of religion. For religion attains the highest degree possible. Let me quote from authorities. Bosanquet says, 'What a man's religion brings him, I should venture to suggest, let him hold to without scruple. It will be the nearest thing to truth that he can make his own.'[1] And Bradley expresses the same when he says, 'There is nothing more real than what comes in religion. To compare facts such as these with what comes to us in outward existence would be to trifle with the subject. The man who demands a reality more solid than that of the religious consciousness knows not what he seeks.'[2]

At first the conclusions of idealism seem harsh to the religious man but reflection shows them to be quite in accord with the religious consciousness. The religious man admits that he sees through a glass darkly, that all God's ways are not revealed to him. And idealism assures him that though his experience does not give him complete knowledge of things as they are, it is certainly valid as far as it goes. We are reminded of the Hebrew idea that one must cover his face to look upon God, for if he would see all he would perish, but looking through the veil he continues to exist and yet sees the best that can be seen.

[1] Bosanquet, *What Religion Is*, p. 29. [2] Bradley, *Appearance and Reality*, p. 449.

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The Key to Scientific Etymology

Max Müller, the reputed father of the Science of Language, held the opinion that all the various languages of the world were derived from a number of common primitive roots. How these roots originally came into being he was not sure. They were there, those mysterious seeds from which the myriads of words spoken in every country and clime grew and multiplied. He did not attempt to solve the problem, but felt that a solution would come one day.

It may be that to some this view of the famous professor would seem extravagant. But I think it can well be assumed that even those of that way of thinking will not hesitate to subscribe to the proposition that at least the languages which are grouped, by common consent, into families—for instance, the Indo-European family—were derived from roots common to all the members of the family. Of course even this narrowing of the field, for the safer application of Max Müller's theory does not solve the problem of

The Origin of Roots

Their very identity is another obscure problem. For we know, as a matter of fact, that the so-called common roots were not found anywhere as such but it is the etymologists who have constructed them for us by an artificial process. Similar words from different languages of the family were compared together, their varying elements were laid aside and what appeared to be their crude unchanging bases were set down as their roots. It is the results of this process that are presented in standard etymological dictionaries such as Skeat's English Dictionary and Bopp's Comparative Lexicon, etc. These 'roots' take us some way indeed but not the whole way. For while the process itself cannot be qualified as strictly scientific, the necessarily haphazard manner in which the result is obtained opens a wide door for unending doubts. The greatest drawback, however, is that as these 'roots' are no more than abstractions without meaning, they furnish no rational basis for fixing the meaning of words in the student's memory.

Real roots, on the other hand, are words with an original sense of their own. This will be evident by giving a little thought to the subject. The words that are found in any language have not always been what they now are. They have been multiplying from a smaller stock of words and have acquired new forms and new meanings, during the course of ages. This is clearly seen by the fact that the vocabulary of every language falls into groups having inter-related forms and inter-related meanings, pointing to their having been differentiated from common word-types. And how has this come to pass? Early mankind had need of only a number of elementary ideas to be clothed in words at first, and as the need arose for giving expression to more complicated ideas, the existing words themselves were multiplied by differentiating them in various ways. Thus one expedient for

making a new word from an old one was to alter one or more of its sounds whereby the original idea-content of the former was differentiated into an analogous one. Another expedient was to link two or more words together so as to signify by the compound word a new idea connected with the idea-contents of the constituent members. The existence of polysyllabic words in most languages is due to this latter process. The signs of conjugation and inflexion too represent separate words that have more or less completely changed their form.

Thus it will be seen that the earliest words were composed of a minimum of sounds; in fact they were all monosyllables like the hypothetical 'roots' which etymologists have endeavoured to build up. But they are the genuine roots of language, each with a distinct idea-content, hanging together and revealing an inter-relationship due to the fact that their idea-contents are reducible to certain central ideas at the back of all thought. Roots are indeed word-types as elementary ideas are thought-types. Real roots are instinct with thought, their sound-vehicle itself corresponding, by a natural aptitude, to the particular idea conveyed.

Now, is it possible to recover the actual roots of any group of languages, that is to say, their earliest words embodying the most elementary ideas with which they began? The present writer is in a position to answer this question in the affirmative with respect to the Indo-European family of languages. It was by sheer accident that the key for disclosing the earliest forms of Indo-European words was acquired and that from an unsuspected quarter.

The remarkably symmetric formation of classical Tamil had led me to investigate its words in a scientific spirit and by diving deep into its ancient vocabulary, with the aid of its earliest known writings, I arrived at a handful of monosyllabic word-types on which all later Tamilian words (including Telugu, Malayalam and other dialects) were built up. An examination of the early forms of Sanskrit and other Indo-European vocabularies revealed the hitherto undreamt of fact that they too were built up in the same way, on the identical word-types and in accordance with definite phonetic laws.

After an account of this discovery had been given to the learned public in a vernacular work entitled: *How Tamil was Built up*, and a brief summary of it in English was submitted to the Royal Asiatic Society, C.B., for publication in its journal, a surprise was sprung on me by Dr. Waddell's Sumer-Aryan Dictionary which appeared subsequently. The surprise—a very agreeable one at that—was in the form of corroborative evidence from the pictographs of the Sumerian language. I shall presently show what that evidence consists in; but before doing so a few words on these peculiar writings will be of interest to the reader. The pictographs or picture writings are drawings of various objects for representing their names in script. All these names were monosyllabic words in the first instance. Thus the picture of a boring tool is drawn for recalling the word *bur* which means to cut through. Again *Er* is a word meaning a sling. This word is pictured by the sling itself. Other meanings were associated with these words later on. Thus, *bur*, to cut through, came also to mean a hole, the ear, to dig, to cultivate etc; *er*, a sling, developed the sense of hurry, to run against, seize,

bring, etc. Again Sumerian words did not always remain monosyllabic. In course of time words, each conveying a simple idea, were thrown together to connote composite ideas. The early pictographs too underwent various changes in their value, first becoming ideographs (that is to say, standing not for the original words but for others denoting analogous ideas), then becoming syllabic signs, and finally some of them letters of the alphabet. Notwithstanding all these transformations in ideas and forms, the Sumerian script has preserved for us a vast number of monosyllabic names of objects with their drawings in their primitive form.

The Evidence Furnished by the Pictographs

for decisively establishing the earliest word-types or roots of language is obtained in the following way: It is an established fact that the original sense of words in all languages had reference to material things in the first place. Immaterial or spiritual senses were always based on the material sense. In this, man has consistently followed the nature of his intellect which proceeds from the knowledge of the seen to that of the unseen. That man was first concerned with material things in the making of language in no way implies an inferiority of his intellectual powers in a primitive age. On the contrary, the naming of material things is itself an act involving all that is best in man's higher nature. For, every name (apart from proper names which are conventional and apart of course from imitative names) is a description of an object or action by its outstanding attribute or quality. To conceive quality as a universal idea and then to apply a quality to one thing in which it is discerned calls forth an intellectual act of the highest order. Now the name of every material thing is actually the name of its outstanding quality. And it is common knowledge that the names of material things are the first in language. We therefore arrive at the conclusion that the names of qualities are the earliest words in language. And the Sumerian monosyllabic names of pictured objects enable us to identify some of these earliest words or concepts of qualities enshrined in language.

Not that every Sumerian monosyllabic name is a primary word or root; but they furnish us with a safe clue to arriving at the real root. Thus, *bur*, to cut through, being represented by a boring tool, makes us see that the outstanding quality of the action referred to is 'forcing a way into' an object. But this idea is already a composite one. *Bur* indeed is only a secondary word. The primary word embodying the simple idea of 'inside' or 'within' is to be found in Tamil as *Uḷ*. This is the real root, composed of the demonstrative *U* which denotes remoteness or hiddenness ('being within an object') and the formative *L*, liable to be changed into *R* and the other linguals. Parallel to the Sumerian *bur*, Tamil has many secondary words derived from *Uḷ* such as *Pur-ai*, *Putt-u* both meaning a hole; *Pul* or *Piḷ* to cut through; *Pul-ua* 'borer' or worm; *Por-i* hole in the sense of the ear and the other organs. There is a large number of similar formations in all the Aryan languages. I subjoin only a few English derivatives: bore, brog, burin, burrow, per-forate, prick, ear, auricle, hear, boor, bury, etc.

On the other hand, we have a primary word in *er*, the second example above cited. The sense in Sumerian, however, is not the first one. Originally the word (from the demonstrative *E* 'above') expressed an upward movement or ascent, then sending up. From 'sending up', that which sends up a stone was named *er* or a sling. There are similar primary words in Tamil such as *Er-i* to throw up and *El̤-u* to rise, ascend. The final *i* and *u* in *Eri* and *Elu* are mere enunciatives as also are the *ai*, etc., in *Purai*, etc., of the first example. Such enunciatives are to be found in Sumerian too. There is a large variety of words derived from *Er* in Tamil as well as in all Indo-European languages. Some of the English forms are: hurry, urge, wreak, hurt, Harry, etc. The form *El* has a larger number of derivatives in Tamil, Sumerian and all the Aryan languages. The Tamil *El* means the sun as the 'Ris-er' in the heavens, light, day, etc. *El-il* is brightness, from the primary word. From secondary forms such as *Kel*, *Tel*, *Sol*, *Pol*, *Vel* and so on the number of derivatives is legion. All the words indeed which have had reference to the sun, its light and heat directly or metaphorically are from the root *El*. (A representative list of Aryan derivatives is included in my '*How Tamil was Built up*). In Sumerian itself we have from this root: *El* to shine, to rejoice; *Elamu* to rise, a hill; *Eru* the shining goddess; *Eussi* daylight, etc. In English east, orient (from the Latin), halo, Helios (from the Greek), Yule, hallow, holy, hill, Alp, Hera are a few of the many derivatives from the primary word *El*.

There is no doubt that by using the Tamil key alone the genuine roots of the Indo-European languages can be ascertained. This key discloses that ninety per cent of the Vedic Sanskrit vocabulary is from Tamil primary words. And what is of local interest, the Sinhalese language is shown to have been developed from the same roots, thirty per cent directly and seventy per cent through Sanskrit and Pali. The origin of Sumerian which is now said to be the parent of Sanskrit, Greek, Latin and English is itself scientifically explained by Tamil roots alone. It was hitherto believed that the Tamilian languages had no radical connexion with Aryan languages; but the key now found entirely reverses that belief.

A Comparative Tamil Lexicon

will make all this plain. It should deal with all the original words of the language and their chief ramifications, noting at the same time the principal Indo-European words which were directly or collaterally derived from them. The light thrown on the primary words by the Sumerian pictographs (as compared with the Egyptian hieroglyphs and the Babylonian cuneiforms) should be freely used. Such a comparative Lexicon will be admitted to confer an inestimable boon to students of oriental as well as European languages.

S. GNANA PRAKASAR.

JAFFNA, CEYLON

Editorial Notes

Idealism and the College

This College continues to stand for a high type of idealism in education. We believe that it would be a great loss to education if this element were to be lost. Yet there are dangers in the present day which threaten it. The curriculum and the examination tend in many institutions to absorb all the interest and receive all the devotion of both the instructors and the instruction. It is not a danger that is peculiar to India alone, but one that is attendant on an age that emphasizes the matter of fact and the material. A great deal of stress is laid by our contemporaries on success, and success is most frequently judged by monetary standards. Many people gauge the worth of collegiate education largely by its bearing on the size of one's income. One's prospects are supposed to be *bettered* by passing examinations of a higher grade.

We have no need to underestimate the value of technical education, or the technical element in all education. Yet even the word ' technique ' has suffered by the mechanical trend of the present age. We have come to associate it largely with skilful manipulation and execution. But the Greek word, *tekhnê* from which it is derived means art, and the ideal of art is beauty. We do a great injustice to the technical side of education if we lose sight of the ideal which is not simply correctness but beauty. Technique is a matter with which not only the scientist is concerned; it is also involved in artistic execution. Its ideal is more than geometrical; it is spiritual.

Another of the ideals of education is truth. The truly educated man is characterized by a burning passion for truth. Here also there exists a danger from an over-mechanical interpretation of the meaning of truth. The end of collegiate education, as it is practised in some communities is the accumulation of facts. Now a fact is that which is true. But it is a far cry to conclude that one who has accumulated a great many things that are true is thereby educated. We have sometimes encountered men who fairly bristle with facts about all sorts of conceivable subjects, men who can impart information on innumerable themes, and yet have none of that culture and refinement that mark an educated man. The aim of our College is not the production of animated encyclopaedias, but the development of men of clear thought, fine feeling and noble action.

It ought not to be so very difficult for those who have reached the collegiate stage in education to keep alive the sense of the ideal. It is conceivable that the village teacher who is trying to instruct unwilling urchins in the elements of writing and calculating may often forget that self-directing, self-conscious personality is the ideal end towards which he is making a beginning. The youth who is in college has come a considerable distance on the journey. He ought to have learned by this stage that what matters most is not algebra or logic or even the

mother-tongue, but himself. He ought to have learned that education does not mean an accretion of facts, be they never so scientific, but the unfolding of a life. No matter how efficient a system of education may be in vogue, there is danger that some will subordinate the ideal to meaner ends. We wish that every young man who enters this College would cling tenaciously to the ideal of becoming the very best of which he is capable. Let instruction be received in that spirit. Let subjects be mastered with that end in view. Let comradeships be chosen and friendship be given for mutual helpfulness. It is this spirit that is the *ésprit-de-corps* of the Madras Christian College. We are all here not alone to get the best instruction possible, but to give the best and the most that we can. India needs a host of sons embued with the spirit of Him 'who came not to be ministered unto but to minister, and to give his life a ransom for many.' No young man's education is complete who has not caught that spirit.

Idealism in education means working and living with the consciousness of our goal always before us. The idealist judges of the worth of a process not by its lowly beginnings, but by its most glorious possibilities. Those who aim at nothing beyond the attainment of the University's seal of approval in the form of an arts' degree will never bring much credit either on themselves or others. Those who aim to be the best they can and who regard their college course as incidental to their ideal will prove themselves the better men both here and hereafter. We are more than biological organisms; we are spiritual beings. Nothing less than the complete predominance of the spirit in life is the goal of the education that commands our interest.

The Renunciation of War

It is significant that for the first time in history first-rate world powers have under discussion the possibility of renouncing war as a means for the settlement of international differences. Whatever may be the claims that are made for international law and policy, it is fairly apparent that for a long time the entire structure of international relationship has been resting on a war basis. The pursuasion of the diplomat has depended to a large extent on the force in whose name he speaks. The ability to negotiate favourable understandings is too often and too unduly influenced by military or naval power. Even peace itself has had a war basis, and nations have deluded themselves into thinking that the best way to preserve peace was to be armed to the teeth for war. At last the world is beginning to understand that armies and navies are not peace instruments. It used to be thought that they were built and maintained to meet the requirements of war; now we begin to see that wars sooner or later have to be made to meet the requirements of military forces. Even international law has allowed militarism to grow and flourish under its benign ægis.

In the United States of America from whence has emanated the proposal that the greater powers form a compact to outlaw war, the lead has been taken by the Christian churches. It is perfectly obvious that war is unhuman, and diametrically opposed to the teaching of Jesus on human relationships. The present proposal is

in effect that Jesus must be taken more seriously, and effect given to his teaching in international policies. *The Christian Century*, a journal of progressive religious thought, has done splendid service in keeping this matter before the public conscience. It has pointed out that in the present state of international rivalry and jealousy there can be no such clear cut thing as a war of aggression. And even if there were, there is no practical device in existence by which the aggressor could be identified in order that he might be brought to book. Further, if he could be identified there is no machinery for dealing with him under the war system. Granted that it were possible to identify the aggressor and deal with him appropriately, you would be dealing with a war situation which has already passed beyond the control of peaceable forces. Thus the militaristic system has so encroached upon the structure of the modern state and upon inter-state relations that it all but dominates it.

What has been the net result of the domination of a political philosophy based on the doctrine of the survival of the fittest ? Has the armed state brought about greater security, or more immunity from the aggrandisements of other states ? The answer is, Nothing of the sort. The military function of the state has encroached upon economic life, and is the mainstay of a huge industry. But people are not going to continue making more and deadlier munitions without using them. International relations are shot through and through with rivalry that expresses itself in competitive armaments, alliances, ententes, balances of power, covenants and leagues. At times nations indulge through their diplomats in the most cordial expressions of friendship, while all the time their policies are governed by mutual distrust of one another. When proposals for outlawing war are made, our militaristic friends begin to ask how we propose to deal with aggressors and offenders. They tell us that there must be at least an international police which is the old thing back again in a fresh guise. They will do anything but honestly admit that the militaristic policy has been a failure, no matter what the angle from which it is viewed. It has fostered rivalry instead of security ; it has induced war instead of guaranteeing peace. It has brought about colossal economic waste. Finally it has made trenches run red with the blood of our brothers, and worked irretrievable wrongs to the home, the state, and to the race.

The proposal is, Let us have done with war. Let us make peace the permanent basis for international relationships. Let us have laws based on peace. Let us put into operation the machinery of peace. The challenge is bold. It is a challenge to build up an international morality in which harshness, duplicity and injustice shall have no place. There is no reason why a group of nations such as the British Empire, the United States, Germany, France, Japan, Italy, China and Russia could not, if they were agreed construct a permanent peace basis for their mutual relationships. What would be the machinery for such a political structure ? Experiments will have to be made to devise the best. Certainly the nations could not do worse than to continue in their adherence to the existing war basis. The present challenge is to put brotherhood into international politics.

What Men Think

A Prayer for India

Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments by narrow
domestic walls;
Where words come out from the depth of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the
dreary desert sand of dead habit;
Where the mind is led forward by thee into ever-widening thought
and action—
Into that heaven of freedom, my Father, let my country awake.

RABINDRANATH TAGORE.

Religion and Beauty

The weight of human experience seems to show that religion is an incurable necessity. Many times people have become discontented with the form of religion that was prevalent, and have at first blush interpreted their discontent as with religion itself. They have thought to get along without religion, discarding its familiar forms. But when deprived of it they have experienced a sense of lack and need, making them conscious that religion served them in some intangible way which they had failed to realize. The truth is that religion does something for us that we need to have done, and that we cannot get done in any other way. When we try to put that experience into definition or description, we find it amazingly difficult. The bewildering varieties of attempts to define the differentiating characteristic is best evidence of the difficult nature of the problem.

In the March issue of *Harper's Magazine* Avis D. Carlson makes another attempt to locate the element in religion that makes it a vital necessity. The article is especially interesting as a human document, a record of the writer's own experience. Conventional religion had lost its grip. Neither the institution nor the sacred scripture spoke with the voice of supernatural authority. The intellectual aspect, the dogma did not seem to be the essential thing. Tradition, dogma, and morality all appeared to be aspects of religion, and yet none of them seemed to be the real thing. Nor did all of them together constitute the real thing. The author found little satisfaction from the statement made so frequently that in religion we are dealing with the imponderable, and therefore should not expect to understand it. Dissatisfaction with traditional religion and discarding the church

brought no rest, and the sense of need deepened. This sense of need was much akin to what Professor Whitehead describes in his *Religion in the Making* a sense of solitariness.

While in this state of mental perturbation two things happened which conspired to restore rest. The first was the discovery of symphony orchestras; the other was contact with a scholar who asserted and was able to carry conviction when he asserted that spiritual realities exist. The article deals in the main with the effect of the first experience. Under the stimulus of a great musical performance the emotional response is precisely similar to one arising from a religious impulse. One is fairly swept away from this world into the seventh heaven. It is an experience which many others have had, though it came as a startling discovery to the author. Many aesthetically minded souls have had similar emotional experiences when beholding a beautiful landscape or a great painting. Others have been thrilled in a similar way by great drama. Miss Puffer in her book on *The Psychology of Beauty* has described this response as mysticism. The feeling of the artist and the religious person are alike in that they both feel at one with the object of their adoration. In the present article Carlson quotes from a number of books on Aesthetics and The Philosophy of Religion to show that almost equivalent language is used to describe the aesthetic and religious experiences. The inference seems to be that they are identical.

We must cordially recognize the mutual debts of religion and art to one another. We may also freely acknowledge that there is in all our human experiences an inter-penetration of values. Nevertheless, Art is much more narrowly concerned with Beauty than with Truth or Goodness, while Religion is in a sense the synthesis of the three. It is perfectly true that Art unlocks for us some of the rich treasures of the universe, and moves us to nobler living. But, however much we may admire and enjoy beauty, as Hegel long ago reminded us, we do not worship a work of art. Worship is that activity of the religious consciousness that makes it transcend every other human activity.

Psychology and the Unconscious

The last few years we have witnessed an increasing use of the term, 'the unconscious' in psychology. It has developed partially as an extension of James' idea of a subconscious or subliminal consciousness. But it is to psychoanalysis more than to any other movement that we owe the increasing vogue of the term. It is used by Jung, to take one example, as 'a psychological boundary concept which covers all those psychic contents or processes which are not conscious, i.e. not related to the ego in a perceptible way.' It is perfectly obvious that there are some mental processes such as certain motives which operate through our attitudes and prejudices, of which we are often unaware. In the sense in which Jung has defined it, no scientific psychologist would have any quarrel. On the other hand it cannot be denied that some of the more radical among the psychoanalysts have used the unconscious as a sort of dumping-ground for all sorts of vagaries and phenomena which they were unable to explain in any other way. The question is as to whether the concept is a necessary one, and one that has come to stay in psychology.

An important critique of the concept of the unconscious has recently come from Dr. A. Campbell Garnett of the University of Adelaide in a work entitled *Instinct and Personality*. It is his judgement, a judgement in which many psychologists will concur, that the psychoanalysts have almost exclusively begun at the wrong place. They have made a beginning by observing abnormal phenomena such as dissociation, terror-dreams, hallucinations, multiple personality, etc., and have attempted to construct a theory on the basis of such facts. Now, of course, there is no denying the facts of these abnormal experiences, and the analysts have had unusual opportunity for studying them, because many of them are practicing physicians to whom neurotics of all kinds come for advice. Further than that, they have been successful in many cases in their attempts to help such folks, though it must be admitted that their failures are not as well advertized. Dr. Garnett's criticism is not of psycho-analytic practice, but with the theoretical interpretation which they have offered. This needs to be made clear. They have begun at the wrong place. The corrective which he offers is to begin with the normal, positive experiences of the mental life. Explain the abnormal from the normal, and not the reverse.

The human mind is a unit, conscious, active and teleological. The facts of dissociation and multiple personality seem at first sight to suggest a disintegration between the conscious and the unconscious. But Garnett does not believe that such an explanation is sound. Not only the abnormalities of dissociation but also the normal experiences of association can best be understood from the view-point of interested attention. Why is it that certain experiences of the past get shut out of consciousness, so that we normally never think of them, and yet they have a disagreeable habit of bobbing up in our dreams or when conscious control is not being exercised? The analysts would say that there is a censorship operative in waking consciousness which is removed during sleep. Garnett says that it is not the pleasantness or unpleasantness of a fact that makes us tend to forget it. But the dominant interests of the personality simply shut out of consciousness all the contrary elements. In sleep or neurotic conditions the interests of the conscious life cease to dominate, and attention wavers to other matters. The normal tendency is for an idea of an action or physiological process to realize itself unless it has heen negatived before attention passes from it. It merely goes on automatically until attention returns to it and negatives it. This automatic and unconscious process needs no hypothetical unconscious mind to explain it. It can be accounted for as a physiological continuation of a neural process initiated by expectant attention and then dissociated. His conclusion is that the entire range of phenomena that are ordinarily taken by the psychoanalyst as evidence of the existence of an unconscious mind are explicable without resorting to that hypothesis. Consciousness must be considered as unitary—not piece-meal. These phenomena are the results of suggestion, i.e., of a conscious process. When attention has been withdrawn because other interests dominate the mind, processes that have not been definitely inhibited tend to go on automatically. The only sense in which we should retain the concept of an unconscious is physiological, not psychological.

World Weather

It is now fifty years since meteorologists began to recognize that for forecasting the weather of a country it is necessary to have data from a very much wider area. The far-reaching character of the subject was first visualized by Hildebrandsson, who in 1897 published the pressure data for ten years of sixty-eight stations scattered over the world, and directed attention to certain relations between them as indicated by plotted curves. Of these the see-saw of pressure in the Argentine and in India was one of the most striking. More recently, instead of using graphical representation, statistical methods have been employed and tables of relationships between conditions of pressure, temperature, rain or river-flood at thirty-two centres throughout the world have been drawn up and the correlation-coefficients have been worked out for each quarter with those of contemporary quarters of the other stations and also with those of one quarter and with those of two quarters before and after. Sir Gilbert Walker, until recently Director General of Observatories in India, in his presidential address to the Royal Meteorological Society gave a summary of some of the results of this work (*Nature*, May 25th.) The main conclusion reached is that there are three big swayings or surgings : (*a*) the North Atlantic oscillation of pressure between the Azores or Vienna on the one hand and Iceland or Greenland on the other ; (*b*) the North Pacific oscillation between the high pressure belt and the winter depression near the Aleutian Islands ; and (*c*) the Southern oscillation mainly between the South Pacific and the land areas round the Indian Ocean. The Southern oscillation is much more far-reaching than the others and its effects take six months or more to be propagated across the area. A study of data for the past thirty-five years has shown that there is a very close correlation (positive or negative) between the following factors : (1) Nile floods of July—October, (2) temperature at Samoa during the following summer, December—February, (3) the same during autumn, March—May, (4) pressure at Port Darwin (North Australia) for September—November, six months before No. 3. (5) pressure at Zanzibar during December—February subsequent to No. 4. Another set of relationships are pressure at Honolulu, Samoa, the Argentine and Chile, Indian monsoon rain-fall and the Nile floods, all of which have a positive correlation, and pressure at Port Darwin and temperatures at Batavia and Samoa which tend to vary together but have a negative correlation with the first group for the same season, June—August. Many attempts have been made to understand the mechanism of such relationships and to find the controlling or initiating factor but with incomplete success. The agents thought to have an important influence are sun-spot activity and the conditions of polar ice in the Antarctic, but in spite of many correspondencies, there is much data that does not fit in with these theories. Although the theoretical aspect remains obscure, the practical application of these found relationships is likely to prove very useful in forecasting. Dr. Walker during his address showed a chart in which his forecasts for nineteen years, based on correlation-coefficients, and the actuals were compared. The large measure of agreement showed the value of the method.

Artificial Diamonds

Towards the end of last century, Moissan, in the course of his extensive researches with the electric furnace, claimed to have prepared diamonds artificially. His method was to dissolve carbon in liquid cast-iron which was then suddenly chilled externally so as to cause the outside of the mass to solidify while internally it was still liquid. Iron, like water, expands on solidifying and so the liquid core would be subjected to increasingly high pressure. It was thought that as the diamond is the densest and hardest form of carbon, it would be formed when carbon separated from solution under high pressure. After treatment with acids and oxidizing agents to dissolve iron and remove other forms of carbon, from a very large quantity of iron a few very small crystals were obtained which were very hard, had a high refractive index, belonged to the regular system of symmetry and gave CO_2 on heating in oxygen, and so were taken for diamonds. Sir W. Crookes also claimed to have found minute diamonds in the residue obtained by exploding cordite in a closed vessel whereby carbon had been exposed to a very high pressure and temperature. In 1908, Sir R. Threlfall heated graphite to a very high temperature under a pressure of 15,000 atmospheres but his products were quite soft and showed no signs of a change of phase. Other chemists have also expressed doubt as to the successful production of diamond from other forms of carbon, and Prof. H. E. Armstrong has even denied that amorphous carbon and graphite are really elementary carbon, these substances having never been obtained quite pure and free from hydrogen. A few years ago, Sir Charles Parsons and Mr. H. M. Duncan undertook a thorough examination of the subject and their conclusions are summarized in *Nature* of May 19th. They conclude that there is no evidence that diamond has ever been obtained artificially, that carbon does not crystallize as diamond at high temperature and pressure, and that Moissan's experiment does not even produce a very high pressure. They found that the purer the iron used the fewer the crystals obtained and that several other methods claimed to give diamonds give entirely negative results. By carefully examining the method of separation and analysis in the case of Moissan's experiment, they have shown that a number of crystalline silicates are much more resistant to the action of the acids used than was previously thought, and that the crystals supposed to be diamonds are probably spinel (a double silicate of aluminium and magnesium). This substance crystallizes in the regular system and has a high refractive index. The CO_2 obtained on heating in oxygen was probably due to traces of carbon dust.

Artificial Sunlight in the Home

In 1893 Finsen published his first paper on the use of ultra-violet light as a curative agent in the treatment of lupus. As a result of his success much experimentation in actinotherapy has been carried out since that time and it has been found that a number of other diseased conditions are benefited by the action of this type of radiation. One of the most striking successes has been that of Bernard and Rollier in Switzerland in the cure of extra-pulmonary tuberculosis by the regulated action of the sun's rays. On the whole, little interest has been shown in this subject

in Great Britain until the last few years. Recently, largely owing to the remarkable discovery that vitamin D is produced by the action of ultra-violet light on ergosterol, great public interest has been aroused in light-treatment. Many makers of scientific and medical instruments have brought out small and reasonably safe ultra-violet lamps and 'artificial sunlight in the home' has become one of the latest crazes. In a special supplement to *Nature* of April 21st. there is a series of articles on 'Actino-Therapy in the Home' in which various aspects of the subject are dealt with.

The kind of light found to be most effective therapeutically is the middle ultra-violet (wave-length 2,900–3,000 A). Rays of shorter wave-length, powerful in killing microbes, fail to penetrate the horny outer layer of the epidermis and so have little or no action on the skin. The longer ultra-violet rays, like the visible rays, reach the blood in the capillaries of the derma and are converted into heat without producing other results. The middle ultra-violet rays are absorbed by the living cells of the epidermis, among which are found the nerve-endings, and exert their influence there.

The first effect of exposure to ultra-violet light is the production of erythema or inflammation of the skin. The inflammatory reaction increases the power of the blood to kill staphylococci as tested *in vitro* and helps the skin to recover from infections such as lupus and surgical tuberculosis. It also causes the formation of vitamin D and increases the mineral metabolism, increasing the absorption of calcium, phosphorus, iron and iodine by the body. However, the details of the processes occurring as the result of ultra-violet light absorption remain obscure.

Light of the active kind is most easily produced artificially by the mercury vapour lamp and by various modifications of the carbon arc. The mercury arc lamp needs to be made of fused silica, most kinds of glass being opaque to ultra-violet light. The radiation from the carbon arc is improved by making the flame long, by using carbons with metallic cores and by impregnating the carbon with various substances such as the fluorides of the rare earths and compounds of iron. The lamps sold for producing artificial sunlight are of one or other of these types. Both kinds give rays richer than sunlight in ultra-violet radiation.

The length of time of exposure in radiant baths is very important, 10 to 30 minutes 2 or 3 times a week being the safe amount with most lamps. Excessive exposure may have very serious results and several of the lamps designed for use in the home have automatic devices for switching off the current after a certain time or are arranged so that the one receiving treatment must be standing and thus less likely to fall asleep during treatment than if reclining on a bed. It is also quite necessary to protect the eyes with goggles. The installation of lamps in bathrooms must be avoided as the high current necessary to run the lamps and the wet surfaces always present make the danger from shock very great.

Ultra-violet light treatment is beneficial not only to man living under artificial conditions but also to animals. It improves egg-laying and hatching in chickens and milk-production in cows. Exposure of the body to cold air is frequently associated with radiant treatment and it is believed that part of the benefit is due to the effect of the cool fresh air on the skin.

The Quantum Postulate and Atomic Theory

A lecture by Niels Bohr in *Nature*, April 14th, 1928, reviews the development of the quantum theory since his lecture on 'Atomic Theory and Mechanics' published in 1925, when the new developments were only just beginning. During the intervening two and a half years a large number of papers on the subject have been published in German, in French, in English and in Italian, approaching the subject from such widely different standpoints as the matrix mechanics which depends on non-commutative algebras, and the wave-mechanics which represents atoms by wave systems. Remarkable success has been attained in correlating methods which seemed to have nothing in common, but all has seemed to the layman a mass of meaningless symbols or of words and phrases that are but little less than meaningless. To Bohr, whose papers fifteen years ago began a new epoch for the quantum theory, we still look for a comprehension of the whole theory and a statement of its trend. In the new quantum theory any attempt to observe the position or the motion of an electron involves illumination by light and interaction with the light. Any observation of an atom involves an emission of energy from the atom and thus there can never be a sequence of observations on an atom in a steady state, for in any observation its state is changed. The position and path of an electron become vague. This is perhaps the first time that there has appeared in physical science the idea that no observation can give precise information about what would have been the condition of the observed object had it not been observed.

The Wider Aspects of Cosmogony

A lecture by Dr J. N. Jeans with this title gives in a supplement to *Nature*, March 24th 1928, an impressive story of the results of astronomical research to which he has himself contributed so conspicuously. It is an awe-inspiring picture of the world's immensity. Geological evidence shows that the total age of the earth is about two thousand million years, enormously longer than the period of man's existence and yet the life in front of the earth will in all probability be far greater than its past life, for, a million years hence, so far as we can foresee, the sun will still be much as now, the earth revolving round it still receiving radiation from it. It seems likely that the future life of the human race may be at least three million times its past life. For mass is convertible into energy and the sun's mass is sufficient for it to go on radiating energy at its present rate, and losing mass at the rate of 250,000,000 tons a minute, for millions of millions of years. Looked at on the astronomical time-scale, humanity is at the very beginning of its existence. If we represent the past age of the earth by a period of seventy years, then on the same scale humanity itself is only three days old, and only in the last few minutes has it become conscious that its earth is not the centre of the universe, and only in the last few seconds had any adequate conception of the size of the external world. A wireless signal travels round the earth in a seventh of a second; light would probably take a hundred thousand million years to travel round the universe: since wireless signals and light are of the same kind and have the same speed the ratio of these times measures the expansion of our spatial ideas since Copernicus, who first saw that the earth is not the centre of the universe.

In the cluster of stars of which the sun is one, probably about a thousand million in number, there is an enormous variety of big and little stars, of bright and faint stars, of red and blue stars, of hot, hotter and still hotter stars. The faintest of *known* stars emits only a fifty thousandth of the light of the sun, the brightest 300,000 times the light of the sun. The smallest known star is about the size of the earth, less than a millionth of the size of the sun (Van Maanen's star; the companion of Sirius) and it has a density about 3,000 times that of the heaviest solid on earth; the largest known star (Betelgeuse) is over 25 million times the size of the sun and has a density about a thousandth that of air.

This whole cluster is itself but one of the many that are seen as spiral nebulæ throughout the sky. These nebulae start as masses of rotating gas, and, by cooling and contraction, centres of condensations occur which become stars. Nebulæ in every stage of evolution from an inchoate mass of gas to a cloud of stars have been photographed. Each nebula is probably roughly about the size of this cluster of which the sun and all our familiar stars and the whole Milky Way form part. It is estimated that about two million such nebulae are visible in the 100 inch telescope at Mount Wilson, and, on the relativity theory, that the whole universe has about a thousand million times the volume of the part of space visible in that telescope.

No star can have a system of planets such as that which surrounds our sun and includes the earth unless it has had a very near approach to some other star. Such near approaches are so rare that even after their lives of millions of millions of years only about one star in a hundred thousand can have planets. Only on planets, so far as we know, can life exist. It does not look at present as though Nature had designed the universe primarily for life; the normal star and the normal nebulae have nothing to do with life except making it impossible. Life seems to be the accident, and torrential deluges of life-destroying radiation the essential. There may be about ten thousand planetary systems in our own, star-cluster; they come into existence at an average rate of about one per thousand million years. So that there are very few planetary systems of so recent creation as our own, and there are probably thousands which are hundreds or thousands of times as old. But our three-days-old humanity cannot be very confident of any interpretation it puts on a universe which it only discovered a minute or two ago.

Book Reviews

Rationalism and Orthodoxy of To-day. By J. H. Beibitz, M. A. London: Student Christian Movement, 1927. Pp. 191. 5*s*.

This is an essay in the philosophy of the Christian religion which attempts to describe religion in the language of biology. The author believes that biological science is best adapted to explain the whole gamut of human reactions to the environment from that of the unicellular structure to the spiritual experiences of the Christian. That being the case a great deal of the book is devoted to the discussion of biological views and their bearing on Christian doctrine. In particular Mr. Julian Huxley comes in for a great deal of critical examination, because the author believes that the data which Huxley uses leads to results other than those which the biologist accepts.

There are certain outstanding facts which biological science has disclosed, and which to the philosopher of religion are important. First, there is the impression that the universe is orderly and shows evidence of rationality. The universe is a cosmos, and not a chaos. Secondly, our observations of cosmic processes leads us to see development with life in its higher reaches, i.e., mental life increasingly in control. Thirdly, certain animals, notably man, have evolved a sense of appreciation of values, of goodness, truth and beauty. Finally these values being the best that we know, and having developed at the end of the process so far, we may conclude that they are the logical terminus of biological evolution. Religious experience is, thus, the highest stage in biological evolution, and is integral to the whole cosmic order. Such a view rationalizes it, while at the same time it recognizes its transcendence.

One of the main points at which the author takes issue with Mr. Huxley is in regard to whether God is or is not a person. Mr. Huxley says that he can find no reason why he should conclude that God is a person. He has considered the idea of God as it has arisen historically, and seems to think that personality is simply one of the attributes which man came to attribute to God. But the Absolute is above this human concept. He is the ordering, directive force of the universe. Such is the scientific view, according to Huxley. Mr. Beibitz is of the opinion that Huxley's conclusion is due to his contact with some of the more crude notions in respect to personality, as a consequence of which he has misunderstood the Christian view. If one follows out the evolutionary development to which reference has already been made, a development which of course Huxley accepts, it places the evolution of values at the summit of the ascent. It is in association with our sense of values that we must understand the Christian practice of attributing personality to God. In view of the fact that the soul of religion is communion with God, we conclude also that personality must be attributed to him. When the author argues

from the same bases that we must go on to a Trinitarian view of God, he is not so happy.

Certainly Mr. Beibitz is right in arguing that the view which attributes personality to God does more justice to the facts of life and experience than the opposite view. A mechanistic view of the universe has no standing whatever among critical philosophers, and we suspect that it has much less vogue among scientists than some have supposed. Altogether the essay before us is a suggestive contribution to a philosophical interpretation of Christianity.

A. S. W.

The Religious Attitude. A Psychological Study of its Differentiation. By A. S. Woodburne. New York: Macmillan, 1927, Pp. 353. Rs 7. Obtainable at the Christian Literature Society, Madras.

Every one whose interest is both in the historical development of religion and in the truth of religion is deeply concerned and constantly occupied with questions that the author discusses in this volume. To an old theme he brings a fresh and penetrating discussion, and we have a serious and able attempt to face the problem of the differentiation of religion from other closely allied experiences. He is able to add an illuminating discussion in a field already full of treatises. The religious attitude is defined as the social attitude towards the extra-human environment, the term 'social meaning relation toward another. The problem is approached from the historico-psychological point of view, and the author brings to the study a keen psychological analysis, a wide knowledge of the history of religions and of thought, and what is more important, a spiritual insight. The relation of religion to magic, science, art and morality is discussed in separate chapters. The critical survey of the important theories in each field is able and clear. Such a survey can be tedious, but this one is not. The exposition is objective, sympathetic with the various points of view, probing with great skill for the central nerves of every theory examined yet preserving enough of individual lights and shades to avoid anything unpleasantly dissecting in appearance. The related attitudes are not disparaged in the interests of religion but the place of each in the whole of life is rightly conserved. The author adduces a large amount of evidence in support of his thesis that the life of primitive peoples is an undifferentiated continuum, and that from this matrix the various attitudes known as the magical scientific, aesthetic, moral and religious have differentiated themselves with the growth of reflection. Thus no attempt is made to derive one from the other as many scholars have done. Magic and religion have sprung from a common substratum where differentiation is impossible. Science does not bring about the disintegration of religion but of magic, and the religious attitude in contrast with the scientific is concerned with life in its integrity and has a cosmic significance. The function of art is to reveal spiritual values discovered in religious experience. Morality and religion have sprung from the common matrix of social consciousness, but the latter is the crown of the former, that which supplies motive-power and criterion for moral judgement The pragmatic reason for bringing the two into association is inescapable.

The religious attitude is the highest reach of the human consciousness and is the habitual disposition to seize upon the spiritual elements in the environment, the effort to organize and conserve them in the interests of the larger life. It is an attitude of faith rather than of proof. 'We can learn that there is a power, not ourselves, with whom we can commune and who is a guarantor of our values only by the venture of faith.' Evaluational creative and adventurous, its great value category is God. The Deity stands for the kind of spiritual values which man has understood and appreciated. The idea of God is philosophically necessary and religiously satisfying; the conception makes the universe more intelligible and our knowledge of it more coherent.

The book is alive, filled with the fruits of rich study and enriched with fresh illustrations from Indian religions. It is full of information where sources are many. The style is lucid, fluent and vigorous. A high level of interest is sustained to the end. The author appears as a democrat of evident spiritual distinction, combined with a keenly critical insight and judgement. Students of the philosophy of religion will appreciate this contribution to the difficult problem of the differentiation of religion. It is at the same time a valuable scientific apologetic for religion. We welcome this stimulating book. May it lead the reader to a new experience of spiritual values through faith which, as the author says, is the completion of knowledge, giving meaning and value to life.

S. J. T.

Israel Among the Nations. By Roman H. Baynes. London: Student Christian Movement, 1928. Oblainable in India from the Association Press, Calcutta.

'This book,' writes the author in a very modest preface, 'can lay no claim either to originality or to scholarship; its object is to give to the general reader a sketch of the history of Israel which may serve as a background for his study of the Old Testament.' This object has been very successfully realized. With the skill of a trained historian and a practised writer, Mr. Baynes guides the reader through the darkness which enshrouds the origins of Israel and her early history up to the establishment of the kingship, and then through all the intricacies of war and treaty, conquest and defeat, aggression and submission which make up the externals of her history. The story begins with Abraham and ends with the close of the greater period, and the main outlines of the story are well set forth. The nation, united in opposition to tyranny, sallying forth from Egypt, the struggle for a foothold in Canaan, revived unity in opposition to Philistia, the succession of the northern kingdom and her fall, the Assyrian menace, the Babylonian domination, the salvation through Persia and the re-establishment of a priest-ruled theocracy, the bitter resistance to the aggressive Hellenism of Antiochus Epiphanes and the final triumph of the old tradition,—all this wonderful story is sketched out by a firm and decisive hand. It is not easy to write such a story in a manner at once detailed and attractive. The choice might seem to be between the writing of a bare dogmatic outline or of many volumes. Mr. Baynes has chosen a middle course. His actual text is brief and pointed, and has all the advantages of brevity. We

see the story as a whole, and are struck once more by the wonder of it, and the romance of it, and the divine unexpectedness of it. But Mr. Baynes saves himself from the undue dogmatism which is almost inseparable from such a method by consigning his doubts and subsiding discussion to notes at the end of the volume. These notes occupy almost half of the volume, and contain references to an exceedingly wide range of authorities, supplemented by a very adequate bibliography. The book, therefore, not only is an attractive sketch of the history of Israel till the beginning of the Christian era, but also gives the key to a further and more detailed study of any particular period. It is at once a readable summary and a most serviceable book of reference and can be safely recommended to any who wish to deepen their understanding not only of the historical but also of the prophetic, apocalyptic, and wisdom literature of the Old Testament.

A. J. B.

The World-wide Call. By H. P. Thomson. London: Student Christian Movement, 1928. Obtainable in India from Association Press, Calcutta, 4*s*.

Mr. Thomson has been entrusted with the task of setting forth in book form the substance of the five 'World Call' Reports which were recently presented to the Church of England by its missionary council. He does his work most attractively. The main theme of his book—the increasing one-ness of the world and the consequent contacts between different civilizations and cultures—is not a new one, but he has succeeded in imparting freshness and vitality to his discussion and illustration of it. He writes of Japan, China, India, the Moslem world, and Africa, and of British people overseas, and his discussions, though necessarily slight, are always illuminating. His book will interest missionaries who can spare a few hours from the details to take a panoramic view. And it might interest many Indians—both Christians and non-Christians—as giving an Englishman's view of missionary ideals and duties, intended to be read by his own countrymen, and therefore free from any suspicion of insincerity.

A. J. B.

How We Learn. By W. H. Kilpatrick, PH.D., LL.D. Calcutta: The Association Press, 1928. Pp. 100. Re 1.

This little book is an exposition of the psychological basis of the project method in education, which the author gave at an educational conference in Vellore in December, 1926. It was reported stenographically by Dr. Mason Olcott, and submitted to Dr. Kilpatrick who revised the notes and gave his permission for their publication. The form is very simple and the presentation unusually clear, so that it should serve a useful purpose in meeting the needs of teachers whose academic qualifications are meagre. We need more books of this type for such teachers to whom the more advanced literature is practically sealed.

The value of the present volume is two-fold. It is a useful exposition of the project method with which the name of the learned author is associated so closely.

Since it discusses the method from the point of view of its psychological basis, it makes clear how purposeful projects are used for educational development in the learning process. It further shows the relationship between pupil projects and teacher guidance. The outstanding merit of the method is that the entire educational process is shot through with purposive activity, not the purposes of other people, be they never so proficient, but purposes self-initiated and self-determined. It makes the school a vital part of life instead of merely a place of so-called preparation for life.

The second value of the book is that it present an unusually lucid account of the psychology of learning. The standpoint is that of the stimulus-response psychology with which Madras students have become familiar through the writings of Woodworth and Thorndike, both colleagues of Kilpatrick in Columbia University. Learning consists in acquiring a certain type of response appropriate to a situation. It is facilitated by satisfaction, and hindered by annoyance. Such satisfactions and annoyances are related to the mind-set or purposes of the subject. Hence the need of teachers working through the purposeful activities of children. That does not mean that the project method proposes to make all learning easy. The truth is learning best takes place when difficulties are presented and thinking is necessary to meet a situation. Life is largely composed of such problem situations, and education is successful when it enables children to meet them with the spirit of learners.

A. S. W.

Fourteen Experiments in Rural Education, described by various writers, and edited by Miss A. B. Van Doren. Calcutta: The Association Press, 1928. Pp. xv + 127. Re 1-8.

This book is presented by the National Christian Council as a sequel to *Village Education in India*, published in 1920 by the commission which investigated that field, and *Schools with a Message*, by Dr. D. J. Fleming, published in 1921. The fourteen experiments herein described owe their inspiration to the work of the commission, and the desire to put into practice some of the newer methods in education. The editor emphasizes the word 'experiment.' All of the schools described may be so described, and yet they have yielded a sufficient fruitage to be worthy of this description for the sake of others who are conscious of similar problems and needs.

The most obvious problem that has given rise to these experiments may be described as vocational. It has arisen out of the conviction that a good deal of the existing village education fails to meet the felt needs of the community. It does not prepare children to do the sorts of things they will require to do in later life. Education is for life, and education of village children must be for village life, if it is to be appropriate. Several of the schools described in the book have attempted to meet the need by making use of the project method. The experiment at Moga, Punjab is familiar. Children learn to build houses, make furniture, weave clothes, etc. In association with each chosen project the school subjects are taught. They

have to learn about the materials used, whence and how they come, and so forth. They have to make every calculation for which the project calls. Several schools run on lines somewhat similar to that at Moga give testimony to the utility of the method, and report that the children learn all the subjects of the curriculum, and usually learn them quicker and better than by the older method.

All of the descriptions in the book are necessarily brief. On that account it would be folly to try to condense them still further for review. We urge all those interested in village education to read the book. It is full of absorbing interest and helpful suggestions.

A. S. W.

The Path of the Elders. By Ernest Erle Power. Adyar: Theosophical Publishing House, 1928. Pp. xx + 230.

This volume is intended, the author informs us, as an exposition of the ancient Buddhist faith, couched in modern terms for the sake of western readers. The author writes as an adherent of the Hinayana school of Buddhism whose aim is to give a presentation of that faith to non-Buddhists. It has the advantage of a work written by one who sees the religion from within, and participates in its way of life. He is able to express himself with clarity and some force, and does not leave us in doubt as to his meaning. As a clear exposition of the faith of a western Buddhist, the book has whatever value it possesses.

The student of the history of religions will find little if anything as a contribution to his field. The book has many statements that the historian would want to challenge, and still others that the psychologist would dispute. In most cases these statements possess the dangerous characteristic of being half truths. 'There is but one dogma in Buddhism and that is that it has no dogma.' Not exactly in the Christian sense, and yet devotion to the *dhamma* or doctrine is one of its supreme demands. Again the author denies the Brahmanic origin of Buddhism. The fact of Jainism with its similarities is evidence that Buddha's religion was not strictly unique. Buddha's debt to the Sāmkhya school is also well known, as also his use of the Upanishads. Mr. Power, tells us that the oriental mind is less matter of fact, less credulous, and more logical and subtle than the western. This is one of those generalizations that is vapid and incapable of demonstration. Incidentally it looks as though the author were congratulating himself at the expense of his compatriots. These are two or three samples of a type of inaccuracy that is characteristic of the book, and unhappily robs it of reliability.

Students' Section

I. H. S.

Oh Saviour of men! Holy Nazarene,
Who swerved the earth from what it was afore,
Whose song of peace, and all too mystic lore,
Was the highest communion, I ween.
Though far estranged in faith, I still revere
A simple man that led a saintly life,
Who, fighting every evil that was rife,
Advanced his Father's holy kingdom here.
The words of God were his, his cult, supreme;
The scribes, he dared, on their own written laws;
He made history on a wooden cross!
His name worked wonders, men did never dream.
Thrice blessed be the place of Bethlehem,
That bore a child, so dear to human cause!

N.S.

5—I

College Notes

RAJABHUSHANA MR. K. CHANDY, whose photograph we publish elsewhere, is the first Member of the Council of Mysore. He belongs to an ancient Christian family in Travancore and after a brilliant academic career he graduated from this College in 1893. In 1894 he sat for the Mysore Civil Service examination and headed the list of successful candidates. The government of the Mysore recognized from the beginning that Mr. Chandy was an officer of brilliant parts and gave him training practically in all the departments of the State. He served as Assistant to the Inspector-General of Police, Assistant Census Superintendent, Senior Assistant Commissioner, Deputy Commissioner and District Magistrate, and Registrar of Co-operative Societies. He was appointed as Excise Commissioner and Inspector General of Registration in November 1917 and in July 1923 he was confirmed as Revenue Commissioner. In 1925 Mr. Chandy was elevated to the high office of the Councillorship in the State and he now occupies the position of First Councillor. Mr. Chandy held all these offices with distinction and he brought to bear a generous outlook in the discharge of his duties. Mr. Chandy is undoubtedly one of the important State officials who has contributed not a little to the great esteem and reputation which the government of Mysore deservedly enjoys throughout India. His work in connection with famine relief and Malnad improvement will always be gratefully remembered by the people of Mysore. The Record of Rights regulation was passed at his instance, and as Chairman of Inam Commission it was left to Mr. Chandy to investigate and settle the several questions that had arisen in regard to the relationship between inamdars and tenants. In all his administrative duties and difficulties the support he received from his Sovereign, His Highness the Maharaja of Mysore, encouraged him to go forward and to give of his best in the service of the people. During the Dasara celebration last year His Highness the Maharaja graciously conferred on him the title of Rajasabhabhushana in appreciation of his valuable services to the State. Mr. Chandy is shortly retiring from the State after nearly thirty-five years of service, and Mysore will lose in him a statesman who deserves to rank with the greatest statesmen South India has produced.

Mr. K. Chandy

WE ARE GREATLY PLEASED TO HEAR OF THE APPOINTMENT OF Dewan Bahadur M. Krishnan Nair as Law Member with the Government of Madras. Mr. Krishnan Nair is the third old boy of the College in the Madras Cabinet as at present constituted. He graduated from this College in 1889 and was enrolled as a High Court Vakil in 1894. He set up practice at Calicut and soon became prominently associated with the social, political and economic activities of his district. As early as 1903 he

Law Member

was returned to the local Legislative Council and continued to represent the Western groups of districts in the Council till 1910 when he was appointed as the Chief Justice in the Travancore High Court. On the retirement of Sir P. Rajagopalachari from the Dewanship of Travancore in 1914, Mr. Krishnan Nair succeeded him and was the head of the administration till 1920 during a period of extraordinary difficulties caused by the great war. His stewardship of the Travancore State was marked by ability and sympathy and he paved the way for the solution of some of the difficult problems that confronted his administration specially in the Revenue department. After he retired from the Dewanship of Travancore he re-entered public life and was returned to the local Legislative Council by the Malabar constituency. Mr. Krishnan Nair has always been noted for his wide outlook and sobriety In the local council he chiefly interested himself in the question of Malabar tenancy. He is greatly attached to this institution and presided over the College Day celebration in 1914. Our congratulations to Dewan Bahadur M. Krishnan Nair.

Tennis Club

The Annual Report of the Tennis Club for the year 1927–28 expressed gratitude to the Senatus for the various improvements carried out in the equipment of the Tennis Courts which were also relaid. There was a great rush for membership at the beginning of the term and Mr. C. S. Natarajan was elected Secretary of the Club. Challenge matches were encouraged so as to give scope to members to improve their games. Thirty challenge matches were played during the year.

The annual handicap singles and doubles tournament began on the 6th February. There were sixteen entries for the singles and there were eight entries for the doubles. The finals for singles were played on the 15th February between Mr. P. C. Matthews and Mr. C. S. Natarajan in which the latter won with a score of 7–5 ; 4–6 ; 3–6 ; 6–0 ; 6–2. The doubles finals were played on the 22nd and Mr. S R. Ramakrishnan and partner won with a score of 7–5 ; 6–2. Mr. C.S. Natarajan and Mr. S. R. Ramakrishnan represented the College in the Inter-Collegiate Tournament and lost against the Pachaiyappas. Among the suggestions the Secretary put forward for the improvement of Tennis courts were an all round wire fencing and erection of a water tap.

At Homes

The members of the College Staff gave their annual at home to the members of the College hostels on Friday 2nd March. It was held as usual on the terrace of the College House and was largely attended by members of the hostels. After some time spent in conversation, the gathering sat down to a sumptous repast. It was nearly 9 p.m. when the assembly broke up.

The Malayalee Association also was at home to the Malayalee members of the Staff on Tuesday 6th March.

THE STUDENTS OF THE FOURTH HONOURS CLASS BADE FAREWELL to Dr. B. E. Cornelius, acting Professor of Philosophy on Monday 19th March. The farewell address expressed their gratitude to Dr. Cornelius for his exposition of modern philosophy and for his unassuming, courteous and generous nature. Dr. Cornelius in reply expressed his thanks to them for the generous terms in which they had referred to his work.

Farewell

THE REPORT OF THE COLLEGE COUNCIL FOR 1927 OPENS with an expression of satisfaction at the few changes in the large staff of the College. Two lecturers of the College returned in September from the study leave which had been granted to them. For two years Mr. Manavalaramanujan had devoted himself to biological research in the Imperial College of Science and Mr. Moses for a similar period had pursued research in Physical Science at the University of Liverpool. In recognition of the work which they had carried out each received the degree of Ph.D. Dr. Manavalaramanujan was appointed as professor of Zoology in the Presidency College and Dr. Moses resumed his place in the staff of the College as professor of Physics.

Annual Report

After recording the sense of loss through the death of Sir George Paddison who for ten years served on the College Council, the report makes the following appreciative reference to the retirement of Mr. T. N. Cunnooswami, Secretary to the Principal:

After thirty-nine years in the service of the College, first as a teacher in the School, and then as Secretary to the Principal, Mr. T. N. Cunnooswami went on leave at the end of the year prior to retirement. Faithful in the discharge of every duty, energetic in every task to which he was called, and capable in the work of administration, he occupied a place in the College which was all his own. The Council recognise with appreciation his many years of cheerful and ungrudging service of the College, and they would express to him their sincere thanks. Mr. Oliver Zacharias succeeded him as Secretary to the Principal.

Attendance was satisfactory notwithstanding the unfavourable condition which prevailed in Madras during July and August.

Regarding the remodelled Intermediate course which had been prescribed by the University the Report makes the following observation:

The outstanding feature of this scheme is that a Second Language has been made compulsory. In effect it means that the mother tongue of the students, its grammar and its literature, receives an emphasis which has been wanting for the past twenty years. When this course was adopted by the University the College determined that the teaching of the Second Languages should be done only by those whose qualifications would inspire confidence. Instruction in the South Indian Languages was entrusted to Graduates, and the step has been amply justified by the results. Vernacular studies receive an attention similar to that accorded to other subjects of the course. The benefit accruing from this is clearly great.

Another change which occurred in connexion with the Intermediate course was the introduction of the study of Geography in the First Class. To effect this Mr.

Watkins, who has special qualifications for teaching this branch of study, was appointed Professor of Geography. The number of those admitted was limited in order that as much attention as was possible might be given to each student.

An addition was made to the number of subjects offered in the Honours courses. The Physics department found it in their power to give a complete course of theoretical and practical instruction in the higher branches of the subject, provided that only graduates were admitted to it and that their number was restricted. So a Post-Graduate class was formed in July and was at once taken full advantage of.

Dr. Asirvatham continued to conduct the Medical examination of all the students of the College and all the pupils of the School. In addition to this he was Medical Officer of College Park Hostel. Dr. Sanjiva Rao was placed in charge of the George Town hostels as their Medical Officer for the period of the academic year.

Regarding College finance the Report makes the following statement:

The income for the year amounted to Rs 2,61,666-6-0. Fees amounted to Rs 1,52,403-15-0, Government Grants to Rs 46,204-0-0. Home Contributions to Rs 57,011-11-9, the balance Rs 6,046-11-3 being derived from rents and miscellaneous sources. The expenditure incurred in maintaining the School and College during the same period amounted to Rs. 2,73,974-13-8, to which must be added a deficit of Rs 8,717-11-11 on the maintenance of the libraries, making a total of Rs 2,82,692-9-7. The debit balance was thus Rs 21,026-3-7. Towards the liquidation of this debit the sum of Rs 2,820 derived from a legacy available for general expenses, was utilised; and transfers were made of a reserve of Rs 1,527-5-5 in the Special Fees Account and of a further sum of Rs 13,661-7-8 from the Association General Account, thus reducing the debit balance to Rs 3,016-12-6. The large deficit of over Rs 21,000 is not as serious as at first appears, for it was not incurred entirely on the year's working, the expenditure including payments upon the indents of the previous year for Science Apparatus and Library books. Government Grant on these items for both 1926 and 1927 is expected, amounting to approximately Rs 10,000; which may be set off against the debit balance of Rs 21,026-3-7, reducing it to approximately Rs 11,000.

This figure represents the annually recurring deficit on the working of the College while it maintains its present standard of efficiency and range of study. The Council express their thanks to Government for the aid which the College has received. At the same time they would point out that the deficit with which the year closed would not have existed had the College been given from public funds even that amount of aid which might have been granted, in accordance with the principles of the Code, to a Secondary School. Some years ago the Council sought to improve the financial position of the College by enhancing the rates of fees. The fees now charged in School and College are not only higher than the minimum standard rate, but higher than those levied in a Government Institution where the entire nett cost is met from public funds. The excess of fees actually collected over fees reckoned at standard rates amount to over Rs 20,000.

But this very considerab'e effort to attain financial stability has been largely negatived by the action of the Department. While the College has borne the whole strain involved in levying fees at higher rates than similar Institutions in the neighbourhood it has reaped only half the benefit; for it appears that the grant payable is reduced by half the excess of actual fee income reckoned at standard rates. While the Council might legitimately appeal to Government for generous financial treatment in recognition of the work which the College is doing for South India they content themselves with laying stress on the fact that, in all fairness, the College is entitled to receive all that the Grant-in-Aid Code makes provision for. They consider that the present manner of dealing with the College is calculated to hinder the very ends for which the Ministry of Education exists.

In spite of financial difficulties the Council has continued to assist students belonging to the Depressed and Backward classes by a partial remission of fees according to the Government's Educational Rule relative to these classes. The amount conceded in this manner exceeded Rs 4,000. The Council are glad to be able to assist in the education of the Depressed and Backward classes, and they desire to continue to do so. It would be a matter for deep regret if on account of financial difficulties they were compelled to revise this position. It should further be noted that it has been found extremely difficult, under the provisions of the present scheme, to ensure that applicants are excluded who though they belong to the classes specified by the Government are not really eligible; and it is certain that among the classes not scheduled by Government there are many deserving cases which remain unassisted. It is advisable that this concession should be made available for any student who is poor but able, whatever his caste or community may be. It is also desirable that the scheme should be so modified as to secure prompt reimbursement from public funds of the amount of fees thus forgone. At present the College may claim that this sum of over Rs 4,000 is its own contribution to the Depressed and Backward classes as until the College receives its full grant under the Grant-in-Aid Code, it cannot be said to have received any reimbursement from public funds.

The Council would again as in past years express its gratitude to the Governing Board for the support of the Home Churches. Their unwavering loyalty and generous sacrifice are felt as a stimulating and consecrating influence by all associated with the work of the College in this country. The Council hesitate to call upon the Governing Board for additional support from the Home Churches as they realize the magnitude of the sacrifice represented by the present contribution. The responsibility to remove the annually recurring deficit of Rs 10,000 undoubtedly rests primarily with the Government The addition of two new contributing bodies, however, would meet the financial situation and also bring added strength to the cause for which this College stands.

Gifts to the Cooper Fund were received from U. F. C. Sunday School, Longforgan, £ 1, from Mr. J. R. M. Wedderburn, £ 30, from Mr. J. G. Tait, Rs 150, and from Mr. Alladi Krishnaswami and Dr. E. M. Macphail, Rs 100 each. Rao Bahadur K. Balarama Iyer made a gift of Rs 500 as an addition to the capital

of the Ramiah Prize so as to provide for the award of a medal in addition to the books.

Regarding the transfer of the Malabar Christian College to the Basel Mission, the Report says :

On the 10th April the management of the Malabar Christian College after a period of nine years was with the approval of Government re-transferred to the Basel Mission, and the Rev. F. N. Askwith proceeded on furlough preparatory to retirement. The Council desire to thank Mr. Askwith for the service he rendered for six years as Principal. Mr. Askwith brought to his task long experience of educational work in South India and notable administrative capacity. The high hopes entertained at the time when he accepted the appointment have been fully justified. The period had its difficulties and anxieties, but under Mr. Askwith's leadership the College was maintained in steady and effective working. It is a satisfaction to the Council that they have been able to discharge this trust committed to them in a time of war, and that they have now handed back to its former Managers a College ready to enter on a period of still greater usefulness and influence.

Owing largely to the inability of the Commonwealth Trust to contribute to the funds of the College the amounts formerly given by the Basel Mission Industrials, the Council's financial resources were never sufficient for the maintenance of the College. A debit balance of Rs 25,385-9-10 has accumulated on this account The attention of the Basel Mission and of the Commonwealth Trust has been called to this situation and it is hoped that a considerable portion, at any rate, of this deficit may ultimately be wiped out by contributions from those sources.

The services in College Church on Sunday evenings during the College terms were maintained throughout the year and were well attended.

College hostels continued to flourish during the year and the report makes the following interesting observation on hostel life :

Vigorous life marked the hostels during the year. This was seen in their debating societies, their athletic achievements, their University results, and their happy social gatherings. The messing arrangements mentioned in the last Report were continued, and worked beneficially. Opinion is steadily growing in favour of the removal of communal restrictions. The annual dinner given by the Professors and Lecturers to the hostel members, at which the inmates of all the hostels sat down to a common meal, was greatly enjoyed. The Georgetown hostels had practically their full complement of members ; but the withdrawal by the Tramway Corporation of the facilities which were such a boon to the residents in College Park Hostel led to a considerable diminution in the number of those who elected to stay in that hostel. Noticeably good health prevailed in the hostels, and contrasted with the sickness around them. This may be largely attributed to the modern sanitary arrangements which were introducted into the hostels. A sum of almost Rs 3,000 was spent on this installation, and was money well spent. About a quarter of the students of the College live in residential quarters which it maintains and controls. With the departure of Dr. Hogg on furlough Mr. Theodore became Superintendent of the Second Students' Home, and Mr. Bingle Superintendent of

the First Students' Home. When Dr. Moses returned he was appointed Warden of College Park Hostel, and thus Dr. Meston ceased to be its Superintendent and Mr. Asirvadam its Manager.

The financial position of the College Magazine is not satisfactory and an effort will shortly be made to secure new subscribers.

The work of College Societies was neither so deep nor so continued as it ought to be. In the athletic life of the College there was real vigour throughout the year. The University Training Corps continued to fulfil a useful function and there was the usual keen competition for admission.

After reviewing briefly the work of the High School the Report concludes as follows :

A record of what the College has done during the past year, even if it be no more than the meagre outline presented in the foregoing pages, emphasizes several important considerations. A few of these may be mentioned in closing. The first is that the College holds a place, in the esteem of those who desire the higher education of their sons within this Presidency, which affords ground for deep thankfulness. No one who deals with the hundreds who apply for admission, or who listens to what is said by parents bringing their boys from far distant parts to enter the College, or who enjoys a quiet conversation with some former student now occupying a place of responsibility, can fail to be impressed by the affectionate regard in which the College is held by those who in all walks of life do a good day's work. The presence of such a feeling imposes on the staff a heavy responsibility. To the Council it is matter for much satisfaction that this responsibility is fully and happily borne by a staff whose work is characterized by capacity, devotion, sympathy, and unity. They see in this the assurance of a stable service to the sons of India which will remain undisturbed by political and economic ebb and flow.

A second consideration is the general recognition of the definite contribution which the College is making to the education of the youth of this Presidency. The College had its origin in the west, but it is felt to be no alien growth in the east. It attracts to its staff chosen representatives of this land, but gives them as their colleagues a number of men drawn from the Universities of England and America. It is planted where two faiths are the acknowledged guides of millions of the population, but it includes as an integral part of its curriculum a study of that divine revelation which finds its culmination in the life and work of Jesus Christ. It links knowledge with religion, and the systematic training of the mind with the nurture of the soul. Thus it is felt to satisfy two needs which at the present time are being constantly emphasized. On the one hand it gives a training which escapes the condemnation of being merely secular, and which makes its appeal to, while it endeavours to provide satisfaction for, every part of man's complex nature. And on the other hand it gives a training which escapes the condemnation of having no practical result, since, by its bearing on the whole personality it fits men for life, enabling them to face responsibility, to be not slothful in business, and to approve the things that are excellent.

And the third consideration is that, while much has been achieved by the

College, fresh doors of opportunity now stand open to it through which it is called to enter on a fuller heritage. If it is to meet adequately the conditions of the present time the College has much still to do to further the instruction and the life of its students. There are subjects which it is fitting that it should soon include in its curriculum, and there is an amount of individual attention which it ought to bestow, and which it cannot give until it possesses a distinctly strengthened staff. There is a closer life between teacher and taught, in fullest harmony with the educational ideals of this land, which only a more complete residential system will effect. And there is a sense of life's values and worth which can be fostered only in surroundings where body and soul receive appropriate setting and exercise. For ends such as these, possible only in a site removed from that at present occupied, the College has now to strive. And while the Council recognize that only through much faith, labour, and patience, will these ends be reached, they do not feel that in reaching forward to them they are essaying the impossible. For through ninety years has the College been guided on its way, in a manner which calls forth the deepest gratitude, and the care which has watched over and directed it in the days that are past inspires the conviction that He that hath begun a good work will perfect it until the day of Jesus Christ.

The Brotherhood Holiday Camp

DURING THE MONTH OF MAY A HOLIDAY CAMP FOR STUDENTS of the college was held near Ketti on the Nilgiri Hills. This is the first time that anything of this kind has been attempted since the days of Dr. Miller's *Mountain Home at Yercaud*. It was made possib'e this year by the kindness of the F. E Rev. Hill of the Wesleyan Mission who gave the use of a building which was made the nucleus of the camp and who also permitted the use of some of the rooms of the school, the one building having been found to provide insufficient sleeping-room for all. Besides present students of the college a number of the staff and several old students and old members of the staff took part, and some of these found accommodation in a neighbouring cottage. For the greater part of the time a tent was also pitched near the main building. The total number of members was twenty-six of whom six belonged to the staff. Mr. Manikkam and his family, who lived at a short distance, took part in many of the activities of the camp, and several students of the college who were staying on the hills paid occasional visits.

The camp was on the site of the old Boer camp beside the large Government eucalyptus plantation. It was about a mile from Ketti village and station and a little further from the Ghat Road. The Ketti Valley is very extensive and is at an elevation of about 6,500 feet above sea-level. Much of it is under Badaga cultivation but there are numerous eucalyptus sholas and many scrub-covered hills and green marshy valleys. To the north, the steep rocky ridge containing Tiger Hill and Doddabetta dominates the landscape.

The weather during May was hot and dry except for a few welcome thunderstorms in the evenings, and even at night the temperature was not found to be so low as some had expected. Excursions were made to most of the places of interest and beauty in the district; some of these excursions took the whole day and involved

walks of fifteen or sixteen miles with much up and down-hill. The following were the chief excursions : Tiger Hill caves, the summits of Doddabetta and Snowdon, Karteri Falls and Power House, Lovedale Sholas, Lamb's Rock, Coonoor, the Ootacamund Flower Show, the Royal Institute of Animal Husbandry, Wellington, the Pasteur Institute, Coonoor, the Botanical Gardens at Ootacamund and Coonoor, Kullakumbi Tea and Coffee Estate. Besides these longer excursions numerous local walks were taken and frequent visits werep aid to Ootacamund, especially on shandy days. A volley-ball court was fitted up near the camp and many exciting games were played. Through the kindness of the headmaster of the St. George's Homes we had the use of their open-air swimming bath which was frequently visited on hot afternoons. A number of students of botany under Mr. Sabhesan derived great pleasure and profit by collecting and studying specimens of the local flora which differs greatly from that of the plains. All meals were taken together in the main building but owing to the sleeping-places being scattered between several buildings, the social life in the evenings was somewhat broken up, and usually the camp divided into groups who played chess, read or discussed in each others rooms. During the last few days various local friends were entertained and after the camp closed several members spent a few days at Kotagiri and some others went to other parts of the hills.

The health of the camp was excellent throughout. It was generally felt that the camp had been very well worth while, and that even where it had not fully come up to expectations valuable experience had been gained for guidance on future occasions. It is necessary specially to thank Mr. Y. V. Narayanayya who at great personal sacrifice ran the commissariat very efficiently and Mr. and Mrs. Manikkam who took great trouble in arranging for transport of samans from and to Madras and in many other ways helped to make the camp possible and comfortable.

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Realism and Religious Reconstruction

THAT the Christian religion is facing, at the present time, the crucible of the most searching criticism and the most far reaching adjustments yet attempted in its entire history, is becoming more and more apparent. Both the thought system and the social and political structure upon which Christianity was reared and historically developed have crumbled underneath the accrued weight of modern life and thought. Nothing short of a complete reconstruction will suffice if our religious ideas and their moral and spiritual connotations are to have any vital significance for us to-day.

It is in the face of this inevitable task that we may well investigate the claims of realism.

Philosophical realism, from its earliest inception, has taken the problems of modern life and thought seriously. This is especially the case with regards to the phase of the movement commonly known as Critical Realism. This development is beyond all question the legitimate child of our own time. It is the scientific attitude of mind and heart directed towards philosophy and metaphysics with the intent to build a new structure of thought, laying the foundations and fashioning the super-structure out of the main concepts of empirical science rather than out of the material supplied by ancient Greek thought and traditional metaphysics. It has faced the problem of knowledge squarely, and it has evolved a system of approach sufficiently well formulated for all practical purposes. [1]

And manifestly, may we not expect that a religion which undertakes the difficult work of adjusting itself to this modern setting shall, sooner or later, discover its vital kinship with that system of philosophy born in the same night of travail? Moreover, in view of the far reaching consequences of such a reconstruction for both philosophy and religion, may we not be assured that such an alinement will mark the beginning of a new epoch in the development of religious thought?

In the brief compass of this paper we can merely sketch some of the salient features of this alinement under the following captions: (1) The Knowledge

[1] By far the best treatment of the subject is to be found in *Principles and Problems of Philosophy*, by R. W. Sellars.

Claim; (2) The Existential Character of The Object; (3) Mental Content and the Basis of Character; (4) The Genesis of The Concept; (5) The 'Stuff' or The 'Existent'; and (6) The Relation of Thought to external reality—The Certainty of Knowledge.

The first four topics relate more especially to the problem of epistemology while the last two are involved more deeply in the ontological phase of realism.

1. The Knowledge Claim

Critical Realism asserts, unequivocally, the positive knowledge claim. It admits of no agnosticism whatsoever. However much we may call in question the body of assumptions upon which it rests or the structure of thought built up in its substantiation, of the positive character of the claim we can have no misgivings. It does more than this; it grubs out the very roots of agnosticism by breaking with an important philosophical tradition which in its very nature gravitated in that direction.

From Descartes to Kant we have the assumption that mind was in perception and thought 'brooding upon its own concepts.' Ideas are looked upon 'as the objects of the understanding when a man thinks.' Nowhere do we have knowledge conditioned upon a cognitive relation between a knowing mind and an external object. Immanuel Kant worked out the full implications of this tradition when he made purely mental phenomena—a limited psychological content—the sole object of knowledge, with the Thing-in-itself relegated to the realm of the unknowable. And idealism has reached objectivity only so far as it has denied the material substance side of the dualism, and made the real the rational and the rational the real. Briefly, the mind, baffled in the face of an impossible situation, has been driven back upon itself as the only reality that can be known.

In modern realism, however, philosophy has made a fresh start in the solution of this difficult and perplexing problem, and it begins with an entirely new statement of the problem. No longer is mind made the object of knowledge in the cognitive transaction; on the contrary, knowledge has come to be regarded as a cognitive relation and function between a knowing mind and an object external to the knowing process. Ideas are elements in perception rather than objects of perception as Locke would have it; they are purely psychological and constitute the way in which the object is characterized for us in the mind. As a distinguished realist has put it: 'Knowledge is seen to be the grasping of the nature of the object by means of and in terms of content.'[1]

Now, it is this positive knowledge claim and this new situation in which the mind is directed to the object outside and beyond its own being and activity which becomes extremely important to a religion that is making any sincere attempt at reconstruction.

Christianity, historically speaking, has made the positive knowledge claim based upon experience. The God of Christianity was manifest in flesh and blood and

[1] R. W. Sellars: *The Principles and Problems of Philosophy*, p. 126.

revealed in the hearts and lives of its votaries. It is in the very nature of the Christian religion to reveal, to make known—its apocalypse is mystery revealed. Such a system as this requires more than a subtle dialectic spun out of the 'practical reason,' more than a mere insistent venture of faith growing out of a mere 'will to believe,' to sustain it; and what is more important still, its redeeming evangel cannot long endure with the object of its faith and devotion concealed behind the inscrutable veil of mystery or relegated to the realm of the unknowable.

It is in this connection at least, therefore, that realism deserves a hearing on the part of the Christian church. Religion can well afford to take full account of this philosophical achievement—especially is this true, since it is in this positive knowledge claim upon objective reality that religion and philosophy meet, finally, upon common ground.

II. The Existential Character of the Object

That knowledge unconditionally presupposes that the reality known exists independently of the knowledge of it, and that we know it as it exists in this independence, is for realism axiomatic. Things exist as 'objects', however, only as the mind attends to them; they become objects through a selective attention on the part of the conscious personality. Here the new statement of the case is clearly manifest. The existent world is no longer a noumenal order which cannot be approached, as Kant would have it, nor is it an 'I know not what substratum underneath a mere qualitative appearance,' as Locke believed. The existent world becomes the immediate object of the mind, which it knows 'by means of and in terms of characters within consciousness.' Our concern here, however, is not so much with the manner as with the results of the solution. Faith in the existential character of the object restores to us a healthy confidence in the existence of a real world which can be known. The benefits of a naive realism are secured at the level of critical thought.

What value, we may ask, has such a conviction and confidence for religion? Let us see.

Religion like modern science is sustained upon reality and must perish without it. Religion has always been objective in its reference. This is why a religion which aims at a mere culture of the heart soon falls into idolatry. The basis of religion lies in man's power to objectify his subjective life and experience.

It is at this point that philosophical idealism has very largely failed in its tendered obligations to religion. Its attitude and basic assumptions tend to make a genuine objectivity difficult if not impossible. Any system which makes spirit the common and all pervasive substance in which all things consist, and which identifies in some way or other this all pervading spiritual substance with the human mind or consciousness is certain to find grave difficulty in getting very far removed from the subjective life of the mind. Ultimately the human mind, like Noah's dove, turns back upon itself—it turns back because it can find no resting place in external reality.

The bearing of this upon religion is extremely significant. Just as Immanuel Kant turned modern religious thought towards agnosticism, in like manner Hegel

and modern idealism has tended to shunt it into subjectivism. In making 'spirit' the *alpha* and *omega* of all reality, at the same time identifying the real and the rational, we have turned away from agnosticism only to find ourselves slipping into the mire of blind intuitionalism. To make this situation more concrete we may say that modern religious thought has stood with critical philosophy to gaze out into the great 'unknowable' without chart or compass to guide into the promised land of objective reality, or it has turned back to mould a god out of its own subjective life without pattern revealed from the heights. And where these influences have not been felt, namely where the traditional agency has been accepted and dogmatically asserted, religion has lost its sway over the heart and mind of a vast and increasing company of these who have accepted the leadership of science.

The dawn of a new day, however, is upon us. This new realistic spirit beckons forward. Moreover, the new knowledge that is available in the sciences opens the way for the reconstruction and development of a religious knowledge and experience which can root deep in existential reality.

III. Mental Content and the Basis of Character

As we have noted above, cognition involves two distinct factors; namely, the knower with a mental content of perceptual images and ideas, on the one hand, and the existential thing selected as 'object' by the mind, on the other. This is what we mean by epistemological dualism. But this dualism exists within a monistic order ot nature, because the knower with his evolved mechanism of cognition is a part of the universe of nature, and has been produced by evolutionary forces common to nature. This monistic conception of nature comes to us from modern science, and it is one of the most important and valuable 'universals' which the modern mind has placed in the foundations of its thinking. For philosophy as for science, the existential world is one system of reality. This is what we mean by ontological monism.

The recognition of two essential and necessary perspectives—the scientific, in which the mind itself is given a place in nature, and the epistemological where the mind in cognition is placed over against all that is external to it—has far reaching significance for both philosophy and religion. We have arrived at last at that degree of maturity in our thinking and technique wherein we can hold firm to both the subjective and objective sides of the religious situation, and we may now develop a religious knowledge in which both the agent and the experience have their place, because the eternal verities and supreme values are to be known and characterized 'by means of and in terms of' the religious consciousness.

In the light of this general perspective, we are in a position to define religion from the standpoint of the religious attitude. The religious attitude is that attitude which views the universe of science, organizes experience, enriches the emotions and directs conduct with respect to what is most worth while—it is that selective attitude which adds value to knowledge.

From this description, it is obvious that religion is very different from both science and philosophy. Science produces the facts as raw material upon which to

work; philosophy weaves this material into fabric and fashions from it the mental garments we wear; it is religion, however, which selects and evaluates and markets the finished product, always from the standpoint of human life and personal worth. And this selective and evaluating process is just as truly a factor in the ideal transaction as are the perceptual experiences out of which science arises or the synthetic work of the understanding and reason which weave and fashion this fabric into garments of thought.

To be sure, this evaluating process must be highly selective. From the standpoint of the religious attitude, man's good is always ideal and man's God is always a limited portion or specific aspect of the total environment. The interests of science are of necessity impersonal and objective; philosophy must always deal with universals; religion, however, seated as it is in human personality and dealing as it does with human values, must always limit or focus its perspective to that phase or aspect of the universe of reality which relates specifically and vitally with its own locus of value. In a word, religion in its very nature tends to be anthropocentric and humanistic.

This selective attitude, moreover, is in perfect accord with the whole cognitive process we have been describing. Just as 'things,' according to our theory of knowledge, become 'objects' through the selective attention of the mind, so, in like manner, the religious consciousness selects and evaluates, in the light of the supreme good of life, and imputes or refers this ideal value content to these things. William Adams Brown, Professor at Union Theological Seminary, puts it this way: 'God is the name which sums up for the worshipper all that is most adorable and satisfying in the universe—power, wisdom, righteousness, goodness, mercy, understanding, love.' [1]

To this conception Christianity will have no difficulty, whatsoever, in making its theological adjustment. From the very beginning, Christianity has been highly *selective with respect to its object of worship. It has ever focused the heart of the* world upon the one matchless personality which it exalts as the full orbed and perfect revelation of a Christ-like God. And long before the advent of Christianity the same principle was in operation in the religion of Israel and Judah, where the God of the Hebrews was characterized in terms of the patriarchal and the fatherhood ideals. Furthermore, Christianity will find here a full support for its *moral emphasis; for* we have here not only a religious knowledge through an enriched religious consciousness, but we have, also, the enriched consciousness as the basis of religious character. In a word, the God of religion who symbolizes our system of values enriches our experience, moulds our character, and guides our conduct.

IV. The Genesis of the Concept

Philosophical realism, both in its general epistemological theory and in its more specific theory of concepts, holds in its grasp the solution of one of the most perplexing problems that has ever confronted religion in its attempt to live its life

[1] The Life of Prayer in A World of Science, p. 14.

and perform its important ministry in a growing scientific age; namely, the problem of criticism.

From the time of Benedict Spinoza and his famous 'Theologico-political Treatise' (1670) there has been an attempt, more or less overt, at some sort of reconciliation between the traditional concepts with which religion has come to be associated and the new concepts of the developing sciences. We must gratefully acknowledge the splendid work already accomplished, especially in the fields of the history of religions and biblical criticism. Historical criticism has unearthed the religious past of the race. Anthropology and archaeology have done their work in a creditable manner. Both textual and higher criticism have developed a technique which has rendered them extremely successful in their respective fields. There remains, however, a very important work yet to be wrought out. This work bears a specific relation with the concepts of modern science and philosophy and for convenience may be designated conceptual criticism.

This type of criticism is based upon the inevitable fact that the so-called scientific mind, both as to methods and results, must be reckoned with. Someone has characterized this type of mind as a new and courageous loyalty to reality, that subordinates our own prepossessions in the willingness to let truth be what it really is. But it is exceedingly more than an attitude of loyalty to truth and a method of pursuing it; it is a state of mind, a body of ideas, governing all our thinking.

Religion has been slow in recognizing this important adjustment. Critical scholarship, thus far, has been occupied, in the main, in the work of clearing away the mediaeval and scholastic rubbish that was heaped upon the original Christian sources, in the belief, apparently, that the work was accomplished in the reclaiming of these sources. Consequently, the apostolic setting with its roots bedded deep in the Hebrew tradition has been made the ardent quest, and scriptural theology has been the final goal of both conservatives and progressives. But while this work has been projected, largely under the inspiration and tutelage of the scientific spirit and method, there has developed a situation which renders it, important as it is, incomplete and but a temporary stage in a larger activity. The situation may be stated in a word: the sciences present us with a system of approved knowledge, a new universe of discourse, the main concepts of which has little if anything in common with the restored metaphysical and theological order with which traditional Christianity is associated. This is the case because our religion at the sources is clothed in the garments of primitive mythology and ancient Greek science. And no less important is the fact that the entire development of Christian theology, from the apologists to quite recent times, has gone on in a setting of thought very different from our own.

A criticism of restoration, therefore, is transformed at once into a criticism of reconstruction. The religious life and thought must be divested of its age-old cosmological and metaphysical setting and clothed in the new. In a word, if the Christian religion would continue its vital redemptive evangel on into the future, it must learn to make use of the main concepts of modern science and philosophy. Such a reconstruction, moreover, requires a type of criticism which has a keen

appreciation of the genetic character of ideas and which has a deep interest in salvaging the essential and enduring verities from the decadent and obsolete conceptual forms in which these values reside.

Realism,both in its attitude and technique, supplies the bases for this sort of thing. Its dualistic epistemology brings into clear relief the fact that the existential reality is a very different thing from that system of concepts which, perchance, we make use of in cognition. The moment we conceive the idea that the history of the world of reality is not to be identified (as idealism has tended to do) with the history of our human thinking about it—a universe of reality that has existed over aeons of infinite time, independent of and prior to all human conceptions—we are well on our way toward an effective conceptual criticism. We are set free from the shackels of traditionalism and dogmatism and supplied with a means of judging all systems of concepts and habits of mind in the light of the fuller developments. Religion as an attitude of heart and mind is, most obviously, as enduring as humanity. It is not the creation of an age, nor is it limited within the confines of any particular cycle of culture. The underlying reality is before us yesterday, to-day, and forever, and the value attitudes are grounded in the very nature of humanity. The thought systems we build serve their day and pass away,

' The old order changeth,
Yielding place to new,'

but reality is not subject to the passing fancies of a protean mind.

V. The 'Stuff' or The 'Existent'

How can there be knowledge of that which is other than our own experience, of that which lies outside and beyond our own experience? This is the problem which philosophical realism faces and undertakes to solve. And the novel feature of the solution lies in its positive knowledge claim apart from all ontological presuppositions.

Modern science and philosophical realism constitute a new species of thought in which there is a decided break with that older habit of reading the mind's own character sticks into things and naively assuming that the external world shares a nature in common with ourselves. Man first came to know his world in terms of his own active, creative spirit, and according to the traits of his own mental life. And it is comparatively recent that he has come to understand, sufficiently, the nature of this mental life to enable him to correct his sense experience and guide in the development of his knowledge, with the subjectively human factor made subservient to the interests of objective reality. In a word, this new species of thought breaks with all anthropomorphic and teleological tendencies. If the universe is found to be spiritual or personal in nature, well and good; but this knowledge must rest upon the facts by which the universe is characterized for us in the content of human experience and thought. Our knowledge of ultimate reality will involve basic ontological assumptions; nevertheless, these assumptions, like the scientific hypothesis, must be made as the most plausible meaning of things,

and these assumptions can be maintained only in so far as the accepted facts warrant their adequacy.

The radiation of this new species of thought has entailed far reaching consequences in the realm of religion. Religion, like ancient science and philosophy, began in childish animism and anthropomorphism, and down to our own day it has built up its entire agency out of a spiritual order of being, projected or reflected into the universe from man's own spiritual nature. In a word, the metaphysical dualism which has characterized our thinking from ancient times has its compliment in the religions that have grown up with it. The Gods of religion have been fashioned out of man's subjective nature and naively objectified; first, in crude anthropomorphic character, but finally in more spiritual and moral qualities. It is this situation, moreover, which makes the new species of thought very disturbing to traditional religion.

Realism supplies, however, the essential factors in the reconstruction of a disintegrating religion; or, to speak more precisely, it opens the way for the development of a religious life native and harmonious with the new order. Three things may be asserted in this connection. In the first place, while we reject that epistemology which identifies knowing and being and while we turn away from that philosophy which makes important assumptions concerning the nature of reality prior to the discovery of its revealed characteristics, we make use of a new knowledge of and confidence in the human mind to know reality. We no longer need to assume the material or spiritual character of reality, a priori; we are quite ready to judge the nature of reality in the light of what it reveals itself to be. In the second place, realism accepts the presence of personality whereever the characteristics of personality are manifest; and, as for science, human personality is regarded the highest emergent in the course of cosmic history; likewise, from the human point of view, it is the highest known value.

Here, certainly, is sufficient material for religion to work upon. This whole realistic attitude leads, naturally, to the confidence that reality—the 'stuff,' the 'existent'—when scientifically known in terms of its revealed characteristics will meet the legitimate demands of the religious nature. A universe so vast, so infinite in time, so intricate and complex in nature, and teeming with energy and life and mind, and so rich in hope and aspiration within the heart of man as to exceed infinitely our grasp may be depended upon to gratify the highest and most urgent quest of the soul. To desire anything beyond this would merely disclose the presence of an exotic and fanciful mysticism.

VI. The Relation of Thought to External Reality—The Certainty of Knowledge

Just how knowledge is possible apart from the traditional idealistic assumptions is the question which realism has attempted to solve. It is likewise the acid test of all realistic epistemology, for it involves the whole question of certainty.

When we transfer this same problem into the realm of religion, we face the question of religious certainty in its most poignant form. How can religion secure

and maintain the realistic status of its Agency if we must not assume, a priori, a causal system over against the universe of science, Platonic fashion, or somehow within the system, Aristotelian life? In other words, if we are not permitted to assume the presence of reason or personality except where the characteristics and attributes of intelligence or mind are manifest, what happens to the God of religion? We are here dealing with the acid test of realism in religion. If it can endure this test, it is most certain, in view of present tendencies, to become 'par excellence' the Christian philosophy of the modern age.

Realism is abundantly able to face the full consequences of its position. Its improved technique enables it to bridge the so-called gap between experience and reality in such a manner as to render the methods of the old idealistic dispensation extremely superficial. Knowledge is accounted for entirely apart from the habit of reading the knower's own characteristics into things. But the matter does not end here: the age-old tendency to anthropomorphize in religion becomes equally objectionable. No longer is it permissible to build up our God-concept out of our own subjective nature, and then project this ideal construction into the universe of science, giving it ontological value. In a word, the metaphysical in the sense of the supernatural has no place left to it in scientific or realistic discourse.

It is in this connection, moreover, that modern science and philosophical realism aim their deadly weapons at the most vulnerable point in the traditional religious system; namely, at the doctrine of God. We must admit the apparent 'atheistic' tendencies of modern thought. Religion has sought to maintain and universalize its traditional theological concepts while science, throughout its entire course, has striven to emancipate itself from the theological view of nature. Modern science is not teleological or theological; nor is it 'causal' in the ancient meaning of the term. It is in view of this situation that we can understand why each new discovery of science from Copernicus and Bruno to Charles Darwin and on to the present have called forth new armies of objectors, armed with every available weapon for the defence of the ancient and sacred citadels of faith.

Realism, however, prepares the way for a new conception of religion. In place of the old anthropomorphism and idealism has come the new attitude with respect to values. After all, religion is not theology or metaphysics: it is an attitude of mind and heart, an irresistible and incurable predilection to evaluate the universe and human life within it according to the supreme good and well-being of mankind. 'It is the habitual disposition to seize upon the spiritual elements in the environment, the effort to organize and conserve them in the interest of the larger life.'

For science and realism the God of religion is, of necessity, all too highly savoured with personal and spiritual qualities to be universalized. Such a selective and exalted concept as that of the God of religion has a legitimate place and function in the center of man's moral and spiritual universe, but to identify such a concept with 'natural law' or with the 'principle of unity of existence' is to secularize and desecrate that which is holy. In other words, from our perspective, the God of religion must be related to the 'end-product' of universal evolution, to that latest and highest achievement in the course of cosmic history.

To this conception of religion Christianity can readily adapt itself. It makes no difference, from the Christian point of view, whether the God of religion, enriched as it is by all the ideal and personal attributes of man's better self, can be metaphysically justified at the beginning of creation or at the heart of the universe of science. It only matters that there is somewhere in the universe of nature a home for personality at its best, and that there are resources available upon which he may draw adequately in the attainment of highest perfection. Religion can still mean the response of the human personality to the personality of God, if God means that creative power and presence manifest within our immediate environment which ever inspires within us that quest of faith through which our spiritual aspirations reach their fruition.

Christianity, by its very nature and technique, is especially prepared to take this step. After all, Christianity is primarily moral. It has risked its all upon one matchless personality. Its supreme ideal, therefore, is already embodied in human life and well within the domain of human values. Moreover, it does not need a universe altogether friendly, nor has it ever claimed that the principle of moral love is absolute and universal. It is quite ready to do battle for its survival and development: this is the meaning of its cross and its evangel. In a word, Christianity asks for no more than the conservation within the economy of nature of that realm of being in which man's supreme good resides.

It seems obvious, therefore, that philosophical realism has produced a structure of thought and a technique of knowledge with which the Christian religion, in its reconstructed form, can find splendid harmony. And it seems equally obvious that the reconstructed system is sure to discover the much desired religious certainty amply provided, in that type of life and experience secured in response to the highest manifestations of spiritual values symbolized in the person of its historical Christ and in the attributes of a Christ-like God which has come to stand for all the resources of spiritual good within the universe.

F. S. KINNEY.

ELSIE, MICHIGAN, U. S. A.

Social Justice

A question that is agitating the minds of many in various lands is that of social justice. The working classes all the world over claim that they no longer want charity, but want justice. Prolonged charity, they argue lowers them in their own estimation and makes them permanently subservient to an unjust and iniquitous social order which needs to be radically changed. Charity, they would urge, is twice cursed: it curses him that gives and him that takes! In politics, likewise, men claim that they want their due rights and do not want any favours. Many among our earnest patriots assert that freedom is their birthright and that they will no longer be content with picking up the crumbs that fall from their master's table. The negroes in America agitate for social equality and stoutly deny the aspersion that social equality is only a subterfuge for free intermarriage with the dominant races. In our own country the so-called depressed classes are weary of supercilious patronage and rightly demand a chance for self-respect and self-expression. Even criminals insist that a majority of them are not wilful enemies of society and, as such, have a right to be restored to society. Criminologists to-day observe that the primary object of punishment is neither retribution nor deterrence, but the redeeming of the criminal to society.

It will thus be seen that social justice is very wide in its scope, although there is no consensus of opinion as to what exactly it means. As good a definition as any that may be given of social justice is that it is a right ordering of human relations. And this right ordering of human relations, it may at once be said, is impossible in a society where each individual considers his own selfish good and does not take into account the common good of the community of which he is a member. Social justice demands that we look upon society not as a loose collection of isolated individuals but as an organism in which there is a close inter-relation and inter-dependence of parts. Social justice requires, in other words, that we abandon the one-sided individualism of the *laissez faire* type and turn back to the wholesome teaching of Plato and St. Paul, to both of whom the individual in his repellent isolation is a meaningless expression.

Confining our attention for the purposes of this article to the sphere of economic goods, we find that social justice plays a very large part there. As a matter of fact, to the ordinary layman social justice means little more than a just distribution of economic goods. The reason why the question of a just distribution is raised at all is that in the world around us we see colossal wealth unshared in the hands of a few and unmitigated poverty on the part of the great masses. In the United State of America which is the most prosperous country in the world, it is estimated that thirteen per cent of the population own more than ninety per cent of the wealth of the land and the remaining eighty-seven per cent have among them less than ten per cent of the wealth. The fate of other countries is not much better either.

In the face of this gross inequality of distribution that we see all around us, the smug type of die-hard individualist says, let the law of demand and supply operate fully and let every man get whatever he can get in a 'free and open' market. He conveniently forgets the timely warning given by Sidgwick that the bargaining powers of the capitalist and labourer are not on a par, and that the labourer, for that reason, cannot hold out as long as the capitalist can. Besides, it is a matter of common experience that a man may be able and willing to work, and yet not get an opportunity to work or receive an adequate return for his work, owing to social and economic conditions over which he has no control. Present-day capitalism has certainly its obvious advantages. But it seems inevitably to bring in its trail such evils as intermittent unemployment, economic serfdom and war. It is also directly or indirectly responsible for unfair competition, monopolies, and exaggerated fortunes. Some of these evils no doubt are being mitigated by the stern logic of events and by the partial application of a doctrine that is much in vogue to-day, viz., the doctrine of equal opportunity. Nevertheless, it is an open question whether individualism or capitalism, even under the best of circumstances, is capable of giving us social justice.

The die-hard type of socialist would say that the producer is entitled to the whole produce of his labour, but such a socialist is becoming a rare quantity these days. Others have said that distribution should be according to effort or according to personal need or according to the hardness and unpleasantness of the task performed. The difficulty with regard to these canons is that they all involve a subjective standard. However, such a difficulty is perhaps not an insuperable one.

Whether we be individualists of socialists or of some other persuasion, there are certain fundamental principles on which it must be possible to get general agreement. 1. Human values are of far greater importance than economic values. Jesus says, 'What shall it profit a man, if he shall gain the whole world, and lose his own soul?' 2. Reward need not always take the form of material remuneration. As we grow more and more in the realization of our social responsibility, the satisfaction of rendering public service would become a reward in itself. This is the ideal that Plato advocates for the ruling classes. Even to-day the Lord Chancellor in the British Cabinet gets twice as big a salary as that received by the Prime Minister, although the latter is the head of the cabinet and the foremost man in the government of the country. 3. It is time that we discovered the possibilities of the simple life. There is no moral justification for the state of things depicted in the following paragraph. 'Recently in this country (U.S.A.) $7,000,000 was spent on a mansion with 121 rooms for one family. A larger amount was spent for a winter residence in Florida by an absentee citizen; $600,000 was spent for a diamond necklace; $20,000 for a hat; $1,000 for a hatpin; $75,000 for opera glasses: $30,000 for an automobile. . . . We puffed away ninety billion cigarettes last year and nearly two billion dollars in tobacco smoke. One earnest Christian man has just spent $500,000 for a play house for his six children.'[1] 4. From the moral and religious

[1] Sherwood Eddy in *Religion and Social Justice*, p. 18

standpoint no one *owns* wealth. He simply *owes* it. It is a trust for which the trustee must render a faithful account to his Maker. For every penny that a man spends upon himself, he must be able to show that it is absolutely necessary for his maximum efficiency as a member of society and that it cannot produce a greater good elsewhere.

With these fundamental principles in the background, we may draw up a tentative scheme for the distribution of economic goods which might be applicable to our present-day society. At the bottom of the scale we would place the idiots, imbeciles, and morons and other such undesirables from the eugenic point of view, segregate them from the rest of the community, and make it impossible for them to propagate their kind. As long as life lasts we would treat them respectfully and provide them with the minimum conditions of civilized existence. In the second group we would place all the dependents among the aged, the diseased, and the infirm. To them also we would give the minimum conditions of civilized existence. The unskilled we would place in a class of their own and grant them a minimum wage necessary for decent living, constantly endeavouring, however, to promote them to the ranks of the skilled. As far as the middle classes are concerned, we would let the economic law of demand and supply operate, taking particular care at the same time to correct and limit the inherent shortcomings of that law by applying the principle of equal opportunity. We would enforce free education, progressive taxation, and a graduated inheritance tax, and remove all unjust privileges. When we come to deal with those at the top of the economic scale, the canon that we would rigidly apply is one's ability to use. If a Carnegie or a Ford is able to use his wealth in the production of greater wealth in the service of mankind, we would let him have it. If, on the other hand, he uses it for entirely selfish ends or abuses it in other ways, we would make it impossible for him to hold it, either by means of law or public opinion or both. In our reformed society, it would be impossible to have a state of affairs like that expressed by a 'representative in England of the Dominion of New Zealand in advocating the support of an air route to the Dominion: "Surely" he urged, "there are many ladies in New Zealand who would be able and willing to pay £20 extra for a dress in order to be three weeks ahead of other ladies in fashion."'

At the present moment in our national life when the industrialization of the country is proceeding rapidly and when there are hardly any signs of the healing of the breach between the wealthy few and the poverty-stricken masses, there are at least two distinct contributions which the good citizen who is true to the dictates of his better self can make to his country: 1. Actual demonstration of the tremendous possibilities of the simple life. We cannot lay down arbitrarily what constitutes the simple life. Each individual and each family will have to decide that for themselves in the light of their enlightened conscience. It is the plain duty of the good citizen to renounce all forms of waste, meaningless luxury, and all cheap ways of advertizing one's wealth. Unless there be excellent reasons to the contrary, the good citizen ought to be satisfied with what is absolutely necessary for food, raiment, shelter, and health and for the securing of opportunities for

culture, recreation, and a reasonable amount of leisure for oneself, one's family and others legitimately dependent upon one. 2. Actual demonstration, of the doctrine of stewardship. The good citizen ought to administer all his material goods, not as though they belonged to him exclusively, but as a faithful steward of God. To any one who acts differently, the warning given by Jesus is 'Fool, this night thy soul shall be required of thee: then whose shall those things be which thou hast provided?'

EDDY ASIRVADAM.

LUCKNOW.

The Muthuvans of North Travancore

About fifty miles to the east of Alwaye or about six miles to the north-east of Cochin, there is a reserved forest area teeming with wild elephants. These forests yield to the Government of Travancore quite a handsome revenue from ivory, spices and seeds. There are few roads traversing these regions; but all round the year they are overgrown with reeds. The Public Works Department has recruited a special detachment to clear up these green reed incursions. All the same there is an eternal musical screech produced by the rubbing of the car against the leaves and cut ends of these inquisitive reeds.

Reeds are not the only companions of His Majesty, the Elephant. The whole region, as it were, instinctively abhors the incursions of the explorer or the exploiter. There is the lean and the hungry leech ever active and on the look out for your unprotected skin. Even putties and stockings are not prohibitions enough to Mr. Leech. He gets in through the crevices or somehow inexplicable to us, and gets right into the soft skin. The trouble does not stop here. Ten to one you get fever of a nasty type due to leech bite. There are also obstinate bears, gruesome monkeys, frightful poisonous, and hairy spiders that await the amateur Mungo Park. But as is natural, the greater the dangers, the greater the mania to risk them. Accordingly some of us set out to this place, Puyankutty. We were two men and two women excluding chaffeur and cleaner.

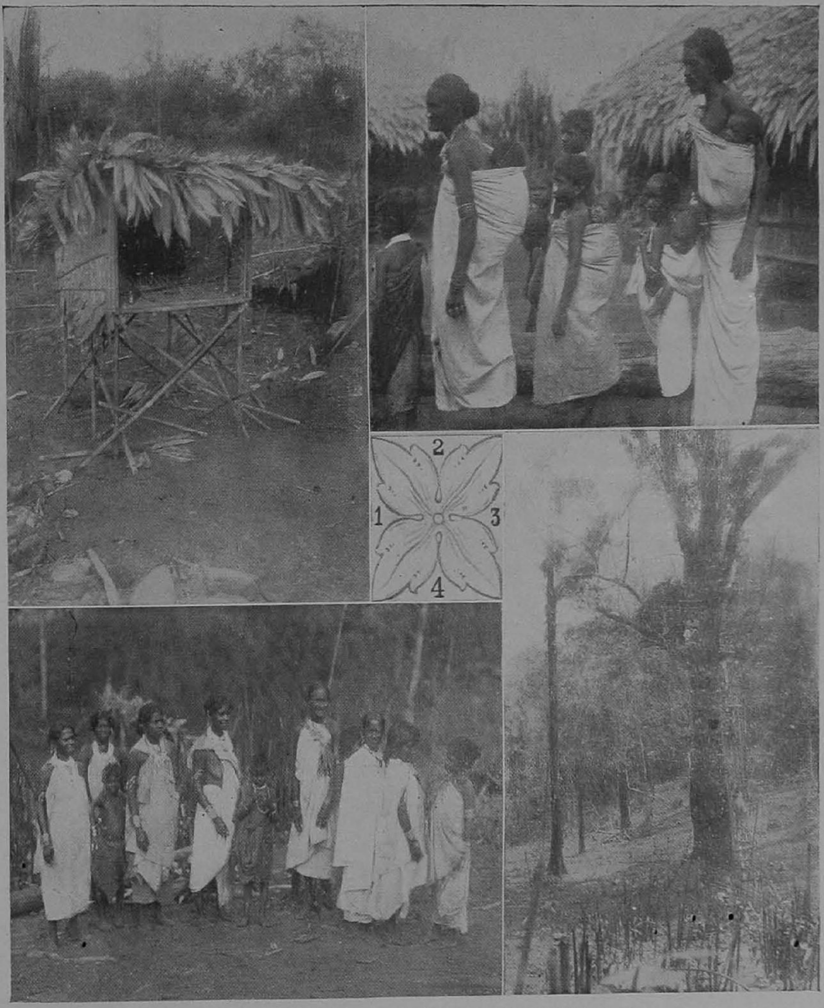
No car was available for this trip except an old Ford that was expected to work on this trip as its last. We were thankful that this at least was available. We set out with stout hearts and in about twenty miles we left all human habitation behind us. All alone befriended only by the noise of the machine and the rickety parts of the car knocking against each other we wheeled on higher and higher up the Western Ghats. Very soon we came to the edges of the reserved forest. Some wood cutters there told us that the wild elephants were troublesome just for the moment, and that due to the rains some trees had fallen across the road in various places, and that we had at least twenty miles more. Just at this place we were fortunate enough in getting a guide well versed in the ways of the animals, the men, and the reeds of the jungles, and he had brought along a twelve bore gun. This last, gave us some courage. Our guide pointed out to us and explained the various marks on the road side. 'That pit and the loose soil arouud it, is caused by a bear yester night; these are the castings of an elephant five days old; that scratch on the tree is caused by an elephant rubbing against it. Look here, that polished appearance on the road side is caused by the elephant rubbing against the roadside cliff. It was done yesterday. This particular region is haunted by a solitary bull.' I must tell you that the solitary bull elephant is notoriously dangerous and troublesome whereas a herd of wild elephants is, comparatively speaking, harmless. The solitary bull is an outlaw from his community and generally is the hero of a thousand tales in

the locality. The particular one that we were talking about once chased a cyclist, a European planter. He did not approve of modern civilization with its motor cars and cycles and rifles. He chased the poor peddling and panting planter. Finally the planter had to abandon his machine and take to his heels, and climb a tree. The elephant at once took hold of the cycle, kicked it to pieces and carried it away on its back, having had the satisfaction that he had done his one good turn that day, namely checking the introduction of modern abominations into his sacred hills. We became quite excited at these stories as we neared a hill that was frequented by a herd of wild elephants. There were some traps, pits, just a few yards below our road. We looked all around us but could see only the green reeds growing wild. Reeds, reeds—reeds, and the reeds rub against your car and make a most unpleasant accompaniment.

Crash! Oh dear!! the hind wheel on the left had given way and the spokes had all become detached. The driver said 'I can do nothing. You will have to walk up the rest. I must go back to Cochin and get a spare wheel. God alone knows whether the wretched bull will keep away from this car.' The guide told us that we had to go only six miles. So he took his gun and I took my camera, and we left the car and all the luggage behind in charge of the cleaner, and we left the cleaner in charge of the hero of the hills.

We marched on. On either side about fifty to a hundred yards away we often heard sounds like gun shots. They were reeds broken by elephants while feeding. It was a feat, a remarkable feat that my mother finished the six miles. I am sure that if she had not been frightened by the idea that the elephant would pounce on her any minute either from behind or from the front she would not have done it. To carry that opulent body up hill for six miles was an olympic feat. But she did it. Every ten or fifteen yards we had to stop to say good-bye rather unpleasantly though to our unbidden guests in vast members, the leeches. They had to be picked off from the feet, from the neck, and very often from the face. About two miles from our destination some of the people whom we were going to visit had come to receive us. From then on we had to go no longer by the road, but through beaten paths under the reeds almost always in a stooping posture. At last we reached the group of huts in a jungle-clearing, and we were told that we need not go any further. We had come to the abode of the 'Muthuvans.'

These Muthuvans had burnt out a clearing on the top of a hill, and had constructed a group of huts all made out of the reeds. The props, the lattice work on the sides, the thatties behind the thatching, the cots, and even the mats were all made out of the reed. A good number of their belongings are also kept in reeds, at times in bamboos. There are some reeds that are four inches in diameter, and a convenient length of this is taken, the partitions at the nodes are knocked off and salt, spices and such other articles are stored up in these tubes. At times cooking also is done in these reeds. When out in the jungle if they get any hare or tortoise or lizard, they take the flesh, ram it into a reed cylinder, strike fire with a bit of steel, make a big fire with some dry reeds and cook the dish over the fire or strictly speaking in the fire, and they say it is very delicious. I am led to believe the same in the light of the



THE MUTHUVANS OF NORTH TRAVANCORE

1. Puja Hut.
2. Method of Carrying Children.
3. Hut Built in a Tree.
4. A Group of Women.

praises offered to the modern paper bag cookery. The spoons and ladles and the knives used for skinning animals are all made out of the reed. There are certain seasons when the reed yields like the bamboo a kind of rice which is used like the ordinary rice. But at times it is cooked or rather baked with honey in the reed. The reed is everything to them.

Their huts are all peculiar. They are very small and airy. Two sides are generally open. Lattice work or 'thatties' are often added to the sides. These huts are a dozen or so in one place, and such groups of huts are placed in convenient places in the different parts of their places of cultivation, generally the side of one or two hills. In each hut one family lives. One family means the father, the mother and children below four. Children above four are not allowed to sleep in the house of their parents. There are some large huts, dormitories—some for bachelors and some for spinsters—each presided over at night by an elderly widower for bachelors and elderly widow for the maids. These people take their food in the houses of their parents and spend their spare time in these dormitories. The mother-in-law has to be fed and looked after by the son-in-law.

All the children, boys and girls, have to shave their heads save for a small pig-tail behind. Only when they come to age are they allowed to grow their hair. This is celebrated by a feasting ceremony known as 'hair tying.' After this all the adults of either sex have to grow their hair and are never allowed to shave or crop. The hair in the case of the girls is tied into a knot, and the knot is kept in position by a comb made artistically out of the reed which acts both as a comb and also as a hair pin.

The infants are always, except when the parents sleep, carried on the backs in a sort of a hammock made out of the upper part of the dress. The child always is in a sitting posture. The people go about, do their work, and the kiddies are there always in their hammocks.

The women dress very much like the Tamils in the saree and are heavily ornamented with beads, some of them having several pounds of beads round their necks. Bronze bangles are also favourites. Glass ones, if they can get them, are considered a luxury. They are generally very shy and as a rule never talk to any male except to their father, son and husband. The stranger very seldom sees them. At the approach of the stranger they run away and hide in the jungles and return only at night fall. I may say that the photographs published here are the first ever taken of their women folk and I had the unique honour of being their photographer. The women became friends after some time with my mother and sister, and they betrayed them into my camera. They like to see photographs; but are averse to the process when they are concerned.

The Muthuvans never live on the same hill for two consecutive seasons. They go to one hill, cut down the reeds and set fire to it. When the fire dies down they all rush in from various directions with a great shout and run hither and thither in the newly acquired land. In this manœuvre they get wild boars, hares, tortoises, lizards and deer all roasted in the fire. These are at once gobbled up, and the event is one of the few sensational ones they have. On these occasions they all get plenty of roasted

stuff to fill every man. The ground is now ready and they have to dig up the place. This is a very slow process. The spades are only three inches long, but the handle is about eight feet, enabling them to work without bending their backs. The soil at the top is just loosened and the paddy sown. The place is a very fertile one, and yields from 100 to 150 fold and very often 200 fold. This is a feasting season—feasting mainly on rice. On these occasions they could beat hollow our expert gluttons. The rice is all threshed and taken. They make a hut—a big one—on the top of a tree and in this they construct cisterns like oil tanks all made out of the reed and they store up rice in these. The whole thing is made monkey proof. Now they take a holiday for about two months.

The whole population with their cattle and the dogs behind them and the children on their backs wander from jungle to jungle, conducting a hunting expedition. They carry their guns, and with their dogs they are able to get all kinds of game, and they subsist mainly on what they get by hunting. Very often they spear big fish—the masheer—and this also is added to their food. At the end of the holiday they come back and live on the rice that is stored up. A few roots and fruits gathered from their surroundings relieve them of their monotony of rice. The next year they migrate to another hill, and this is repeated year after year. I noted one peculiar thing among them. They were able to tell the ages of all their people accurately. In fact they are very strong about dates. They have a way of calculating these dates. 'When my first son was born we were on the "Tiger hills." Next year we went to the Bear Hills and so on. I have now cut down and cultivated twenty-six hills, and so my son is twenty-six years old.' They can thus quite easily remember the dates of any event.

Their lives are by no means calm. They by themselves are a peace-loving and quiet people, very seldom known to quarrel. Drink has not yet penetrated to this quarter, but almost every night the wild elephants come and worry them. At times a tiger comes to steal one of their cows or one of their dogs, and in these latter scuffles some of the people get wounded. To afford some shelter they make a shed on the top of a strong and high tree communicating to the ground by a ladder. They are quite safe from the elephants here. But the leopard climbs the ladder himself, and to prevent this they place a screen on the ladder.

The social relationships of these people are also very curious. Marriages are arranged by the contracting parties, and are seldom or never arranged by the parents. A young man wants to marry a particular girl. He tells his friend about his desire. This friend finds out from the girl if she is agreeable to the match. If the two are agreeable the parents have to arrange for the marriage. Parental displeasure never stands in the way of the match. On the day of the marriage the bride and the bridesmaid go out to the field and pretend to work. The bridegroom and his friends chase these girls and catch the bride, at times after a mock fight. The bride and the bridegroom have to spend that night in the jungle away from the huts. They may make a small shelter for themselves for that night. They are married now. The next day the couple comes back, and all the people have a good feast. Later on all these people, including the newly married couple,

merge into their every day duties, the only difference being a new hut added for the new couple. Divorce is by mutual consent or by the separation of either party, and *there is no stigma attached to either party. They can and do marry again.* Monogamy is strictly observed. Irregularities of sex life are almost nil or very rare. Dishonesty is almost unknown—at least at a very low level. In the big paddy storehouse every man has his own cistern. When his stock is exhausted he never tries to take from that of his neighbour, although none of these are kept under lock and key. Nobody suffers on account of this. If it is known that one home has no food prepared because of scarcity, or due to the absence of husband or wife, or due to any other reason, all the other houses send a small share of everything they have in food to that home. And so nobody in the community goes to bed empty-stomached. Equal distribution of the absolute necessities of life, done in a voluntary manner, almost instinctive among them now, has eradicated many kinds of vices.

Their religious beliefs and practices are also very simple. They have no idols *at all and no priests;* but they believe in a god, *swamy,* and they make a small hut away from their place of abode as a shrine for their swamy. In this they keep a small bell and some incense. They come often to the swamy, and make their requests, and often thank the swamy for benefits received. They have some sort of ancestral venerations. All their dead whether young or old, male or female, are considered ancestors. At times they take some food materials near a stream and offer them to their ancestors and call them by their names. It means nothing more than a repetition of all the names that they can remember. Later on they eat up this food and thus ends their ancestral venerations.

We lived among these interesting people for two days in one of their dormitories. They were shocked, no doubt at the familiarity of the different members of the family with one another. By this time our driver returned with a spare wheel and some watchmen were able to keep off the rogue elephants from our car with some fire. Thus without anything worth mentioning we returned, carrying with us only the happy memories of the wild elephants and the broken wheel, and last but not least 'the Muthuvans.'

J. P. JOSHUA.

MADRAS.

The Ancient Hindu Conception of Music

While the bold and dogmatic assertion of Shakespeare about 'the man that hath no music in himself' nor is moved by the harmony of sweet concord being 'fit for treasons, strategems and spoils' may well be doubted by many, it is well-nigh certain that there are few who would deny the delicious charms and bracing virtues that really belong to the divine art. Melodious effects are entrancing. They fascinate and elevate the soul. To put it in Addisonian language our hearts 'melt away in secret raptures' whenever our ears are entertained with really enchanting music. But it is not our business in this essay so much to dilate upon the beauties of music as to enter into a brief inquiry into the ancient Hindu conception of *sangeetha.*

The ancient Hindus defined *sangeetha* as a euphonious combination of *geetha, vadhya* and *nrithya.*

'Geetham vadyamcha nrithyancha
Thrayam sangeetha muchyathe.'

[*Geetha, vadhya* and *nrithya*—these three in unison produce music.]
These, uttered in solemn accents, are the words of the poet as to what constitutes genuine music, worth the name. The first of those three elements connote vocal music, the second signifies instrumental music and the third represents the art of dancing and keeping time. There is no music where these three constituents are not represented in a symphonious blend. Random strains destitute of such consonance can in no wise be termed *sangeetha.*

As to the source of *nadha*, or musical strains our forefathers had an exceedingly fanciful and suggestive theory to give us. Before learning this it is necessary to bear in mind that the Hindu conception of the art of music is essentially spiritual. It is so even to-day. The deity of *Sangeetha Devata* has its special worship. Nor is this all. Has not the famous South Indian saint-musician Thyagaraja gone even so far as to sing in one of his *krithis* that those of us who are ignorant of music are incapable of obtaining salvation? Again, was not *nadhopasana*, or the worship of music, preached by him in another of his songs? Indeed, the conviction had gradually grown upon the saint that the seven fundamental *swaras* or notes of the Hindu music can ultimately lead to our finding eternal bliss, free from the bondage of re-births. The reason for this is, as we shall indicate below, that our ancients believed that the origin of musical notes is internal, being evoked as it were from within the human organism by subjective psychic forces.

The soul, they said, which longs to breathe a strain induces the mind which in turn stimulates the *agni* (fire) in the navel, while this last agency acting upon the

breath sends it up in order from the navel through the throat and mouth out into the air. The syllable 'na' in the word *nadha* represents *prana* (breath, or the principle of life) while the latter syllable in the word is said to signify *anala* or fire, and it is by the union of *prana* with *anala* that *nadha* is inspired. To quote the old *sloka*:

'Nakaram prananamanam,
Dhakara manalam vidhu,
Jatha pranagni sam yogath
Thena nadhobhi dhiyathe.'

[The letter 'na' represents *prana* and 'dha' *fire*, while the combination of *prana* and *agni* results in *nadha*.]

Every one of us is able to hear this *nadha* after it has been finally expelled through the various passages described above; and it is the aim of the ascetic to 'go within himself' and try to trace the internal origin and spiritual functioning of the melody which remain cryptic all along. Once the yogi is able to hearken to this inborn music and enjoy its spiritual rhapsody and mystic splendour, he has attained to the enchanting inheritance of the saints in light.

We have indicated how the very word *nadha* is symbolic of the above mentioned theory of our ancestors. It now remains for us to give an idea of the greatness of music as propounded by them. In the idealistic flights of their philosophical imagination, our veteran *rishis* held that the whole world would cease to exist, if their were no *nadha*. For is not the whole universe only a materialistic illusion created by our ideas—ideas born of language which in turn is only a combination of sounds (*nadha*) in the form of words and sentences?

'Nadhadheena matho jagath'

[The whole world is *nadha's* and the fulness thereof.]
Again, is not music the source of universal joy, gladdening as it does the hearts not only of human beings, but also those of children, kine, and even the venomous serpent?

'Sisur vethi, pasur vethi,
Vethi gana rasam phanihi.'

[Children, kine and even the serpent are charmed by the sweet effects of melody.]
As a matter of fact we often hear that a foaming savage beast can be tamed by the persuasive charms of sufficiently ravishing and transporting strains.

Further, the edifying virtues of music were strongly emphasized by our elders. It is indispensable for a life of faith, grace, love and duty. For the Gods of the Trinity (Brahma, the Creator, Vishnu, the Preserver and Siva, the Destroyer) are themselves music-souled (*nadhathmika*). Substituting *nadha* for Word in the opening lines of the Gospel according to St. John, our patriarchs might well have uttered, 'In the beginning was the *nadha* and the *nadha* was with God, and the *nadha* was God. The same was in the beginning with God.'

V. BALARAM.

MADRAS.

Some Interesting Points in South Indian Philology

I. Dravida and Andhra

1. Open the pages of any Sanskrit work that mentions the names of the countries of India. You will find Dravida and Andhra as distinct countries. There was a time when the Andhras were alone known to the Aryan world, viz., the period of the Aitareya Brahmana which mentions them. But there was never a time when the term Dravida included Andhra under it.

2. Dravida represents the name of a country, whose people are the Dravidas. Andhra represented a people in its earliest known significance, and latterly it referred both to the people and to the country occupied by them.

3. Dravida and Andhra latterly meant the languages also spoken in these countries.

4. Coming to the languages, philology leads us to an undifferentiated mother-tongue of these people, of which the present day South Indian dialects are mere isolated groups. Kumarila speaks of the Āndhra-Drāvida Bhāshā, not the Drāvida-Āndhra Bhāshā.

5. The Andhra was thus from ancient evidences the original or at least the principle stem.

6. Neither the grammars of Sanskrit, nor the individual grammars of these languages ever knew of a Dravidian group of tongues, of which Tamil is represented to be the type. Hēmachandra and other grammarians spoke of a *dēshi* element apart from Sānskrit or Prákrit. Before Caldwell coined the word, the vocabulary of these languages knew only of 'tatsamams,' i.e., Sanskrit or Prakrit words, 'tadbhavams,' i.e., words of the same origin, mispronounced by the South Indian mouths, and the *dēshi*, words of indigenous origin.

7. We have known the immense sea-trade of the west coast of the peninsula, and from the earliest times, there have been settlers who mixed up with the races. The Lemurian theory lends to further admixture, if at the time of its submersion man appeared on earth. We also know of migrations into the south from further India and the Archipelago. The language of the extreme south which is Tamil has much of admixture in it and cannot form a type for the other languages, whose admixtures, if any, bear a different history. It is no wonder therefore if Caldwell had to express himself in highly qualified language, when he said, 'Notwithstanding many interesting analogies with Sanskrit, Greek, Gothic, Celtic and Persian which may be discovered on a careful examination of the Dravidian tongue . . . . the *essential* characteristics of these tongues are such as *seems to me require* us to *regard* them as *in the main* Scythian.'

8. The stock argument that Tamil has an ancient literature cannot alone prove anything. Philological work in the South is yet in its beginnings and the forms of that literature, whose dates are *yet doubtful* (and bordering sometimes on the mythical, e.g., the Sangam Age where each Sangam sat with its same president and poets for thousands of years) cannot have any meaning until proofs are adduced to link them with the history of its own and with that of the other languages. Nor does an ancient literature, yet preserved, prove by its bare existence that the other languages were non-existent or uncultured or necessarily derived from it.

9. Scholars of the other South Indian Languages reject the view of Dr. Caldwell (viz., of the innovation of a Dravidian group, where Dravida is made the type) as baseless and misleading, and as *making, invidious distinctions.* If antiquity is the question, we find the Andhras mentioned earlier ; if group representation, we have Kumarila's Andhra-Dravida Basha; if the *classification of the great* grammarians (of the Prakrit and the South Indian languages) is to be taken into account, we have the *dēshi* ; if historical admixtures have to be isolated and eliminated no language of the south can yet claim to be pure and unmixed. If, however, a working hypothesis for an unbiassed judgement is all that is wanted, the safest sub-division that can be made will be 'The South Indian Group of Languages,' and I for years have used only this term in preference to all others, as the least misleading and the most serviceable.

II. Ethnology

1. The South Indian races were supposed to enter into India before the Aryan migration into it. Various theories have been propounded as to their origin. We have thus Dr. Caldwell's theory of Scythian descent, Sir William Hunter's *Kolarian* admixture with Caldwell's Dravidian, an Australian origin, a Lemurian theory, a Mongolian theory, etc. and towering above them all, Friedrich Muller's theory of the Munda origin. Ethnologically Risley speaks of the unmixed South Indian as a squat figure with a black skin and a negro-like projection of the nose.

2. Coming down from a northern region, the Scythian or the Mongolian cannot be black in complexion. In dismissing such theories Risley remarks that 'it is extremely improbable that a large body of very *black* and conspicuously *long-headed* types should have come from one region of the earth which is peopled exclusively by races with *broad heads* and *yellow complexions.*' The Australian theory does not take the physical type into consideration, while at the time of the Lemurian submersion no one knew the type of man that escaped into our land. After reviewing all the ethnological evidences of the descent of the people of Southern India, Caldwell, who had his own theory about us, had to confess that our physical bearing was essentially Aryan, and did not tally with his theory about our Semitic descent.[1]

[1] The following extracts from his writings may be of some interest '. . . ' omitting for the present, the question of colour, it does not appear to me that there is any essential difference between the heads or features of the Dravidians and those of the Brahmins. . . . It would be surprising indeed if under such circumstances, varieties of man did not make their appearances,

3. We have now to account for Risley's unmixed types with a squat figure, a black skin and a negro-like projection of the nose. These are the paleolithic people of Southern India of the Negritto type who entered the country from the Guzerat side. The first traces of them are seen in the Subarmati valley of Guzerat. According to Mr. Foote 'their art crafts in stone were in kind more numerous than, and in shape and make far superior to the Australian or the Tasmanian. Similar paleoliths were seen in Cape Colony, Zambesi, Somaliland, Egypt, Palestine, the Caucasian Provinces, Crimea, Poland, Siberia, Germany, Austria, Switzerland, France and Spain.' This African type thus occupied the greater part of the then known world and in India we see them branch off from Guzerat to the South through Kolhar in the Kanarese District of Bijapur and thence across the river Kistna through the Lingsagar and the Nandar Districts in Haiderabad to the sea. From Nandar, a branch entered the Ceded Districts and settled at Sirvēl, Koilkunta, Rāyachōti and Bellāry. Some of them then entered Mysore and settled in the Shimoga and the Kadur Districts. A branch went further south and their paleoliths are seen near Madras, and microspic traces in the Chingleput, North Arcot, Tanjore, Trichinopoly and the Madura Districts. This is the earliest evidence that we have of the inhabitants of the south, and the geological records can be safely relied on. These represent the black ethnic type.

4. The other non-Aryan races whose type has been changed or is changing may be the Lemurians, the Australians, the Kols, the Mundas, the Mongolians, the Scythians or any, or some, or all of them. A combination of two or more of these non-Aryan types cannot produce an Aryan type.

5. There is no denying of the fact that a non-Aryan type existed in the south long before the Aryan advent. Very recently Mr. Thurston took measurements of the South Indian races, and confirmed the distinct non-Aryan descent of some of them. But generally speaking, 'the Dravidian type of head will even bear to be directly compared with the European. . . . The Dravidian heads differ from the English, only in being smaller and narrower with a preponderance in the former of the signs of timidity and subtlety, and in the latter of physical and moral courage.' How then has the original type been changed? Was it due to the ancestors of the South Indian languages? Was it on account of the Sanskrit speaking Aryans? Let us consider the latter first.

and if ethnologists looking at the question from a distance did not sometimes doubt whether they could all be referred to a single race of pure blood'.

Sir George Campbell in showing the strong Aryan features in the south says 'that among all the Hindu tribes the Aryan element now prevails and that the presence more or less of the aboriginal element is only a question of degree. A change of language takes place when passing southward we exchange Mahratta for Telugu or Kanarese. But looking at the people we see no radical change of feature or characteristics. After all in their main characteristics the southern people are very like those of the north. Among some of the inferior tribes of the south, the remains of the thick lips, the very black skin and other features may still be traced. But colour perhaps excepted, the aboriginal features are probably gradually wearing away'.

A confession from an opponent to the theory, viz. Dr. Caldwell may profitably be quoted:

'The general conclusion to which we are led seems to be that whilst the physical type of the Dravidians of Southern India including that of the uncivilized Todas seems to be substantially identical with that of the Aryans,' etc.

(i) *The Sanskrit Aryans.*—The probable date of their entry into the South must be long after the events of the Ramayana. The Ramayana shows that at that time there were only a few Aryan settlements in the Dandaka scattered in different parts of it, and the non-Aryan settlers there were a regular menace to them. The mention by Sugriva of several South Indian kingdoms gives us no ethnological clue even if that portion of Valmiki's text is not an interpolation. It must be some centuries after the events in the Ramayana that Sanskrit Aryans could have come farther south. That was the age when Sanskrit was fast ceasing to be a spoken language. The language of an over-powering people such as the Sanskrit Aryans cannot become a dead language unless its representatives live long in single isolation outside their own community. We have therefore to admit the fact the Sanskrit Aryans who came to the south must have numbered but a few. Their influence could thus be more intellectual than physical. They imported their religion, civilization and arts into the land; they enriched the literature of the country by Aryan themes in local tongues. Though numerically weak, they transformed the thought-current of the population by their superior culture. Ethnologically the propagation of their race was of supreme importance to them; they practised strict morality; their males could after marrying into their clan marry even as Manu said into all their next lower clans; but their girls were always to marry within the caste.

(ii) *The Fore-fathers of the South Indian Languages.*—It is impossible to expect that a handful of Sanskrit Aryans could change the ethnic type of nations counting millions of individuals. The change is so vast that we should find an explanation for it in some other Aryan quarter. The Negrittos, the Scythians, the Mongolians, the Australians and the rest about whom hypotheses have been advanced by scholars belong to the non-Aryan type, whose combination cannot produce an Aryan type. The only people that yet remain to be considered are the vast hordes of settlers that preceded the Sanskrit Aryans and who spoke a language of which the later day Kanarese, Malayalam, Tamil and Telugu are the dialectical variations. For the change of ethnic type which we noticed above, the conclusion becomes inevitable that this vast population must have been Aryans.

6. We have thus a conflict of races and of languages. Firstly during the paleolithic age many thousands of years ago we have seen a black race of people entering Guzerat and colonizing the southern part of the Deccan and Southern India. The vast numbers of their paleoliths in certain parts indicate a very large population. Theirs was a settled ethnic type. Ages of unmixed life vastly expanded their number and fixed by heredity their ethnic character. The residual element of their language, if any, must bear analogy with that in Cape Colony, Germany, Siberia, and all the countries which they peopled. Secondly, we have to take into account the races of men, if any, of the Australian and the other types of whom scholars have made so much. It is these races that by endogamy or exogamy constituted the non-Aryan types of the South. It is between these and the early fore-fathers of the Aryan element in the present day type that the conflict of languages and races arose. Like their ethnic character, the languages also of these non-Aryans slowly underwent a change and we find to-day a large number of dialects in the

country bordering on the Telugu or the Tamil, the Kanarese, the Malayalam or the Tulu. Any theory of the South Indian languages that does not take into consideration these ethnological bearings of the problem fails to give a satisfactory explanation.

III. Languages

The Aryan settlers that this ethnic basis demands must precede the Sanskrit speaking Aryans by many long centuries and should belong to a remote age when even the Vedic Sanskrit itself may not have been differentiated. An examination of the dēshi element in these languages therefore becomes necessary and I shall in the space yet left for me briefly survey one or two aspects of this Indo-Germanic character. The non-Aryan element in them can well be investigated only after the Aryan is eliminated, and we can in the course of this treatment clearly see whether the non-Aryan survived more or less or completely succumbed to it. This leads us to a determination of the Indo-Germanic affinities of these languages, and the other bearings of this problem. But if I am asked to state what I consider to be a typical illustration of the Indo-Germanic relations of these languages I quote two verbs from Telugu, *trācgu*, to drink and *wrayu* (*n. wracta*) to write. The consonantal relations of T and G with D and K respectively or too plain to require a phonetic explanation. The main point of interest is the underlined half-nasal C, called *artha anusvaram* found in the strict grammatical spelling of the word, but lost in pronunciation. The symbol indicates that at one stage in its history the word was really *trāngu*. Curiously enough this lost sound in Telugu is preserved in its Teutonic form in E. drink; A.S. *drinkan*; D. *drinken*; Ger. *trinken*; it is absent in the Icelandic *drekkà*; and the Gothic *drigkan*. The Telugu verb *wrayu* (noun *wrata*) still preserves the sound of the initial W which is lost in the English *write*; A.S. *writan*; Icel. *rita*; Sw. rita; Dan. *rigten*; Ger. *recissen*. For want of space I give below just ten examples of this class, all from the same part of speech, viz., the verbs:

1. (Tel.) *lē* (archaic, occurring now in imp. second pers. sing. *let-tu*, *ponī lettu*) let it go. Cf. Tam. *pohalām*; *irukkalām*; E. *let*; A.S. *laeton*; O. Sax. *latan*; Goth. *letan*; O. Fries. *lata*; D. *latan*; Icel. *late*; Sw. *lata*; Dan. *lade*; O.H.G. *lazan*; N.H.G. *lassen*; Lith. *leidmi*.

2. (Tel.) *throyu*, to throw; A.S. *thrawan*; O.H.G. *drajan*; *drahan*; N.H.G. *drechen*; D. *draiyen*; to turn, to twist.

3. (Tel.) *pilu*, to call, to bid; A.S. *biddan*; Icel. *badja*; Ger. *bittan*; Goth. *bidjan*.

4. (Tel.) *piku*; Kan. *pikku*, to pull away; A.S. *pycan*; N.H.G. *piken*; D. *picken*; Dan. *pikku*; Sw. *pikka*; Icel. *picka*.

5. (Tel.) *vēgu*, to be fried; Tam. *vēgu*; E. *bāke*; A.S. *becān*; Icel. *baka*; Sw. *baka*; Dan. *bage*; D. *bakkan*; G. *backen*.

6. (Tel.) *peruku*, to pluck; Tam. *pidungu*; A S. *pluccian*; *byciian*; L.G. *plukken*; Dan. *plukke*; Sw. *plocka*; Icel. *ploka*.

7. (Tel.) *mēyu*, to feed; (*n. mēta*, food) Tam. *mēi*; E. *meat*; A.S. *mele*; D. *met*; Icel. *mater*; Dan. *mad*; Sw. *mat*; Goth. *mets*.

8. (Tel.) *pōyu* (*n. pōta*) to pour, to put; Kan. *hākku*; D. *pooten*; Dan. *pōdar*.

9. (Tel.) *yean*, to bring forth; Tam. *Yian*; Kan. *īn*; E. *yean*; A.S. *eanian*.

10. (Tel.) *chū* (reduplication *chuchu*) to see; A.S. *seon*; Icel. *sja*; Dan. *see*; Goth. *saihwan*.

Incidentally a few other analogies also may be mentioned:

1. Goth. *guda-faurhts*, god-fearing; *gud-hūs*, god's house; Tel. *gud-i*, that in which God is, a temple.

2. O.H.G. *weidan-ari*, hunter; *wēt-ari*, hunter; Ger. *weidinon*; Tel. *wēta*, hunt; Tam. *vēttai*.

3. Goth. *alla*, all; Tel. *ella*, all; Tam. *ella*.

4. O.H.G. *bēto-mar*, one who prays; *beta-hūs*, house of prayer; Tel. *vēdu*, to pray.

5. In O.C.Sl. *gla-gol-u*, noise, the form of *gol-gol* is taken by the German philologists as a hypothesis. In Telugu, the word *gōl-a*, noise is still preserved and the form *gol* need not therefore be a hypothesis.

6. Lat. *juven-ta*, time of youth; Goth. *junda*, and similar words have the pre-ethnic suffix *ta* whose etymological origin is said to be obscure. This *ta* is still preserved in Telugu, in *chinna thanamu*, etc., the time of young age.

7. (*a*) The participial suffix, *ant-a* (nom. sing. *baranto*; gen. *barantahē*) of the Avesta has been explained for instance on the basis of the accusative termination *-en* (*barant-em*) being placed on a level with *aspe -m* (stem *-aspa*). It may be definitely stated that the accusative suffix Tel. is *-m* thus Tel. *vadu pustakamu -m goni techchenu*, he brought the book. (*b*) The cardinals, abstract numerals and the ordinals. The action of the Aryan and of the non-Aryan elements in these languages is clearly brought out in a morphological examination of the numerals. It is these numerals that set many a South Indian scholar on the wrong scent, and no system of treatment is complete that interprets the changes exclusively on the one to the wrongful neglect of the other. The dealings of the Aryans with the non-Aryans necessarily require the use of some non-Aryan forms in social life, and their original Aryan had thus gone out of use. We have in these languages.

Tel. *rendu*; Tam. *irandu*; Kan. *rendu*; two.
Tel. *mū(n)du*; Kan. *mūnu*; Tam. *mūnu*; three.
Tel. *nālugu*; Kan. *nālku*; Tam. *nālu*; four.
Tel. *a-yidu*; Tam. *anju*; Kan. *ayidu*; five.
Tel. *āru*; Tam. *āru*; Kan. *āru*; six.
Tel. *ēdu*; Tam. *ēḷu*; Kan. *ēḷu*; seven.
Tel. *enimidi*; Tam. *ettu*; Kan. *eṇṭu*; eight.
Tel. *tommidi*; Tam. *ombadu*; Kan. *ombattu*; nine.
Tel. *padi*; Tam. *pattu*; Kan. *hattu*; ten.
Tel. *iruvadi*; Tam. *iruvadu*; Kan. *ipupattu*; twenty.
Tel. *nūru*; Tam. *nūru*; Kan. *nūru*; hundred.
Tel. *vēyi*; Tam. *āyiram*; Kan: *sayira*; thousand.

Beyond one thousand the South Indian language have no definite words for these numbers. It may also be noticed that Tamil has for five *anchi* the derivative from the Aryan Skr. *pancha*. The Tamil and Kanarese words for eight are *ettu* and *entu* respectively from the Skr. *ashta*. For one thousand Telugu alone has a distinct word (*vēyi*), the Kanarese *sayiram*, being the derivative of the Aryan *sahasra*, and the Tamil *āyiram* being a further derivative from the Kanarese *sayiram*. Another fact may also be noted that Kanarese and Tamil have an earlier hundred which is ninety and an earlier thousand, i.e., nine hundred.

First: The proethnic suffixes for this numeral are in the Indo-Germanic Languages (Indg.) *-uo*, *-mo*; *-tmmo* and *-isto*. In Telugu *-uo* enters largely into the combination of all numerals. We have thus *okat-ō*, and *okati-ava* first; *rendō*, *rendu-ava* second: and so on for all numerals.

Two: The Aryan form *doyi*, *duuo*, two occurs in the Telugu and the Kanarese compounds as in *kan-doyi* the two eyes.

Let us take the multiplicative suffix *vāram*, the Avestic *vath*: The interchange of *vā* to *ma* in the South Indian Languages (Sgg.) can be seen from the following examples. Thus even in the Aryan invocations of a later day.

Skr.	*Kum Kuma*:	Kan.	*Kun Ku-va*
,,	*Grama*	,,	*Grava.*
,,	*Chamari*	Tel.	*Savara.*

Coming then to our multiplicatives, we have the corresponding forms for the Aryan suffixes thus.

Skr.—*ekavāra*—Telugu *oka-māru*

Coming to the distributives, their oldest Aryan expression was in reduplication. Thus Skr. *panca-panca*—five each. Telugu has the same reduplication as in *okatokati*, one each; *rendurendu*, two each.

Exigencies of space preclude a fuller treatment. But the morphology of these languages indicates the existence of both the Aryan and the non-Aryan elements side by side, and the truth as already pointed out, viz., that treating them exclusively as the one or as the other is certainly an error.

(*c*) (1) The Indg. frequentative suffixes *-le* and *-er* play a very prominent part in the S.I.G. (South Indian Group). They are not merely frequentatives. The frequentative idea leads as its next step to plurality and these have in consequence been in some S.I.G. languages used as plural suffixes. Thus Tel. *bada-lu* to be exhausted; *vada-ru*, to prattle; *arasu-lu*, kings; *neyu-ru*, the nearer individuals, i.e., friends.

(2) The Indg. causative *se*, Goth. *is-on*; which occurs as *-p* in gras-*p*, clas-*p* is also the causative suffix of S.I.G. the Tel. in *-chu*: Kan *-su*: Tam *-um*. Thus Tel. *chē-inchu*, to cause to do; (*kri* Skr.) *tāk-inchu*, to cause to touch; Kan. *kikiri-su*; Tam. *seyy-um*; Tel. *tri-ppu*, to cause to turn.

(3) The statement that the S.I.G. languages have no gender other than the pronominal suffix is not true. Instances are however very rare. In the Sanskrit word *rūpa*, form, may be seen how it is attacked by S.I.G. masc. suffix *-ri* in the form (a handsome man) *rū-pa-ri*; and by the S.I.G. fem. suffix *-si* in (a handsome woman) *rūpa-si*.

(4) The Indg. has only one accusative suffix *-m*, like the earlier forms in S.I.G. which also is *-m*. In later days Telugu while retaining the *-m* analyzed it and produced accusative suffixes in *-n* and *-nu*, all of which are in grammar represented a variants of the *dritam*, i.e., the nasal *-n*. Thus all the acc. forms of Tel. *coo-ra* (E. curry) are *coora-m*; *coora-n*; *cooran-u* which in nominatives in stems not ending in a, e, or o takes the form *-m*, *-n*, *-ni*, as in Tel. *cevi* (Skr. *srū*, to hear) ear; *cevi-m*; *cevi-n*; *chevi-ni*, all accusatives.

(5) Many stems in the S.I.G. form their nom. masc. and fem. singular without a case suffix. (*a*) Thus for *a* stems: Tel. *kūna* (a young one); Tel. *bāna*, Tam. *pānci*; a wide-mouthed pan or pot). (*b*) -i stems Tel. *peyya* (the female young of a cow, heifer, etc. Tel. *penti* (female); Tel. *dadi* (a female servant); Tel. *kodi* male young of a cow, heifer, etc. (*c*) -n stems: Kan. *gandan*, a male hero; Tam. *Rama-n*; *Krishna-n*; *Govinda-n*; Telugu has lost the *-n* in some cases and changed it into *-nda*, in some cases cf. Indg. *-uent*. thus *Ram-undu*.

IV. The Prosody

The prosodial system of these languages has also given us its own truths. A line in poetry of some of the ancient European languages consisted of two sections, each containing two strongly stressed syllables and of these four long syllables three were alliterated. Three severe and consistant rules were thus required for this poetry, viz. that the section, the strong accentuation and, above all, the alliteration must be preserved. This alliterative poetry has its copy in the rules of the prosody for the ancient South Indian poetry. The *alliteration monai* was according to the modified rules yet preserved in the two main stems of this group of languages, Telugu and Tamil. It has to be at the beginning of all the four feet in a line or at the beginning of any three or any two of them.

The rhyme which in Europe is at the end is in Southern India in the beginning of each line. It is also at the beginning of any three or of any two feet in a line. This fascination for alliteration and rhyme in the poetries of two different peoples one living in the south of India and the other in the north of Europe cannot but be a further evidence for the race and the language of the peoples to whom these poetries belonged.

V. Conclusion

(1) The statement that the S.I.G. have far reaching Aryan relations is generally rejected by the scholars. I have in this paper attempted to show that there are some Aryan analogies worthy of consideration that falsify the view that these languages have to be treated as decidedly non-Aryan. This non-Aryan tendency has gained ground by a preferential representation of Tamil by the writers living in the farther south. The view has to be admitted that the S.I.G. have to be treated as partly Aryan and partly non-Aryan, and it is hoped that the time is not far off, when the real type of them all will be fully recognized. Till then, the philology of these languages cannot be said to be definitely settled.

(2) The treatment set forth herein also points to another important truth. The primitive Aryan stem of the S.I.G. has a distinct place among the earliest divisions of the Indo-Germanic Group which as a whole requires to be studied and modified in relation to the vast material that the S.I.G. furnish. And I firmly believe that one day or another this study will certainly be made by the West also and certainly for the profit of her own languages.

(3) As to the exact nature of the S.I.G. the meagre treatment that is possible in a paper like this will not suffice. The points herein touched are merely indicative of a fuller treatment and show.

(1) that such ethnological changes can be possible only with an immense Aryan population, who must as such be speaking their own language;

(2) that the Aryan element in these languages verifies the truth of ethnology;

(3) that the progenitors of these languages, who entered India long before the Vedic Aryans must belong to an early branch of the Aryan Race;

(4) that the Teutonic Branch of languages of the Indo-Germanic Group has by far the largest affinity with the S.I.G.;

(5) that it is necessary to take the S.I.G. as originally Aryan, that later on became intermixed with the aboriginal, and not as originally non-Aryan with a later Aryan admixture;

(6) that as we go further south the type becomes less reliable on account of greater foreign admixture due to extensive sea-trade, and to the Australian, Javanese, Lemurian and other elements, and that the cause of the unsettled condition of the philology is due to Dravida being taken as the type; and

(7) that the phonology is and morphology of these S.I.G. make it mostly Aryan and partly non-Aryan.

T. Rajagopala Rao.

Madras.

The Psychology of Value

> Aye, but a man's reach must exceed his grasp,
> Or what's a heaven for ?
>
> BROWNING.

In a broad sense, 'value' is a psychological term. Though its significance is economic, yet it is always a person that appraises a thing as valuable or otherwise. A thing's value or lack of it depends purely on the judgement of a person. But it is not in this sense that we shall consider the nature of value. Our task in the present essay is to determine what value is, how it affects us, what needs of ours it satisfies, what modes of and tendencies to action it suggests, whether it is a product of all the three phases of mental life, and whether it contributes to the unfolding of personality.

There is an end that shapes our plans, deny it though we may. There is always some motive behind all our actions though we may not be aware of it. There is no such thing as aimlessness in human affairs and what commonly goes by that name is only a different type of aim from that which a person was expected to have. Nay, we might even say that 'aimlessness' is itself an aim for, by being 'aimless,' some deliberate action is involved in putting off all 'aim.' All our actions are characterized by purpose of a noble or base kind.

In using the words 'noble' and 'base' we have come to grips with our problem. In the first place these two words suggest that value is a social term. It is the individual that passes these judgements but back of that judgement there lies the accumulated judgement of his countrymen, his clan, his tribal group, or his family. The organism we call 'man' is itself a product of society and the judgement that he passes is a social judgement. And we cannot think of anything that is at once social, psychological and ethical other than a value judgement. It marks the human tendency to criticize one's own actions by the 'higher self.' But the 'higher self' is really the 'social self.'

This criticism is what is known as 'value.' Now the question whether or not after the criticism a man profits by it is an ethical problem. But the criticism itself, the judging, 'if I act in such and such a manner, what will people say ?' is psychological. Ethicists would probably include this in their field, but, on analyzing the nature of the criticism, we find it to be more psychological than anything else. The criticism is marked by hesitancy, deliberation, and concentrated thought.

The process then of arriving at value is largely a matter of mental exploration. Value is the product of the higher mental processes.

The question now arises as to the value of our pursuit of value. Why do we seek value ? What would happen if no value existed. To begin with let us rid ourselves of the idea that there is any such *thing* as value. We have only valuable objects

and we have the process of valuation, but we seek in vain among the odds and ends of the world for the thing going by the name of value. Why do we seek objects of value? How do we profit by the valuation process?

The answer to the first question is simple. We seek value because we must. Rational creatures that we are, our actions are purposive. There must be an object of pursuit, an ideal towards which we strive. We require some motive to inspire our actions, otherwise we would be as good as dead. It is value that is thus purposeful. Our aims depend on our conception of value. To the philosopher what is of value is that steady vision of the one undivided whole. To the aesthetician it is to draw that perfect picture which reflects the real spirit of Nature. To the politician it is to see a Parliament of man and Federation of the world established. To the religious-minded it is to see that peace and goodwill are made to dwell on earth. All that they do, all that they think or feel is imbued with this ideal they have before themselves. To pass a judgement of censure on the actions of people without taking into account the ideals they have planned for themselves is not right on the part of the ethicist. One feels that what are known as 'circumstances and consequences' in Ethics as extenuating the unethical conduct of persons are really an appraisal of their actions in relation to their values. In any case that ought to be the deciding factor.

It may be urged here that if what has been stated above is to be granted then the mad man himself must also be above censure. Certainly; the mad man may not be too lightly or hastily condemned. For one is inclined to think that the insane man is suffering from an overdose of his ideal, without the knowledge of how to achieve it. There is action in him too, but it is action in the wrong direction as a result of which the aim has been thwarted.

Enough has been said, however, to justify our inclusion of 'value' under the human instincts. For in the first place, it has been seen that it is a highly complicated reaction that value calls forth. It is truly serviceable to the human species, for it has no small place in the advancement of man's interests; it is characteristic of the species too, for there isn't anyone to whom there is not something or other of value; and it is capable of subsequent modification inasmuch as when one's 'mental vision' expands, he puts away childish things and seeks greater values.

Even if it be not granted that value is itself an instinct, at least it may be allowed that the principal instincts depend on our appreciation and pursuit of value That all-comprehensive instinctive of self-preservations is at the bottom of our conception of values. In life, ideals count for much. They are the pivot of society. Nations thrive because of their ideals, so do individuals. To seek value is to stand fast and not be swept away by the flood. It is often remarked that though such and such a man perished, yet the ideals he stood for once still remain. The Buddhist doctrine has it, that action remains, not personality, and 'action' in my opinion, is best interpreted as value. No man is remembered for his own sake. The world cannot afford to count the individuals. The individual is nothing but a drop in the ocean. He is great because of what he strove to be, and what he strove to be depends on what made him strive to be that. So then we have not

only self-preservation, the instinct, but the Buddhist sense of 'self-preservation' which goes beyond the realm of the living.

That value is the result of the cognitive processes needs no special mention, for it is self-evident. The process of valuation is a type of reasoning, and the definiton of reasoning as given by Miller aptly explains the nature of value. 'Reasoning is controlled by thinking—thinking organized and systematized according to laws and principles and carried on by the use of superior elements of technique.' In the case of value the 'laws and principles' are represented by the *standard* of value a person has chosen.

Now though the process of valuation is mainly instinctive, yet the standard of value comes at the end of a process of inference. It is by taking into account some of the standards of value already arrived at by the world and valuing them that a standard suited to the needs of the individual is framed.

It is not the less self-evident that the feeling side of mental life has very much to do with 'value.' Why does a man seek 'value'? Evidently because it gives him satisfaction of a particular kind. The process of valuation involves imagination—mental manipulation—and imagination has a marked tendency towards emotional experiences. A work of art 'pleases,' and it pleases means that it is 'valuable.' A beautiful poem delights because its value lies in its raising us above the dross of the world. In short value has an appeal to the aesthetic side of man's nature.

It has been said that valuation involves a definite choosing between two conflicting ends, that it involves deliberation. It enables a man to take the initiative and act so as to bring about the best possible results. It leads him to do things he would never have done without it. It spurs him on to achievements which once he never dreamt of. It nerves his heart, it steels his sword. It infuses courage into the coward, arouses the lazy, cheers the diappointed, and is the only hope of toiling mankind. If at all there is anything that encourages the belief that life has something worth living for, if optimism is still the dominant note in a person's outlook, it is because life has *values* worth striving for.

From what has been said above, it is clear that value is the chief agent in the unfolding of man's personality. Personality is ths result of education and the function of education is to draw out the best in a man's nature. The teacher's duty is to hold before the pupil some 'value' which would attract him towards it and without stopping him there lead him further. But it is not so much in presenting values before him as in making him understand the process of valuation that the true function of the teacher lies. Once this is grasped, once a pupil has come to decide for himself wherein the value of a thing lies, then he may be depended on to seek that value.

It might not be improper to speak of a 'value quotient' on the analogy of an intelligence quotient. For more and more, the qualifications of a man must depend on the values he prizes and the ideals he stands for. The intelligence quotient is the measure of a man's private possession, as it were, for intelligence is a question almost associated with heredity. But there is no such egoistic tendency

manifest in value. It is an 'altruistic' standard dependent not on a man's native or acquired traits taken separately, but on both of them conjointly. As such a value quotient would presuppose and include intelligence. The 'value quotient' would place all people on the same plane and judge not whether they are brilliant in this subject or that, not whether they can or cannot do a thing quickly, but whether they are an asset to society, whether they have enriched the values of humanity and whether their contribution in any way brings man nearer the desired end.

K. BALASUBRAMANIAM.

MADRAS.

Editorial Notes

The College

The annual report of the Principal, given at the Prize Giving function, is reproduced in full in the College Notes. We have all learned to look forward with pleasurable anticipation to Dr. Meston's reports, for he has a happy faculty of making live facts which in others hands would be dry and uninteresting. The year under review is one of steady, untiring work in the service of the youth of South India. We all rejoice in the opportunity of making our contribution to the national life. India is forging ahead, slowly but steadily. The more her young manhood is enlightened and educated, the safer and more secure will be her future. This College believes that the type of education needed to develop the best national life is one that combines the best scientific method with the sublimest spiritual ideals. The better we are able to equip our laboratories, the better we are pleased for the sake of the students. But laboratories and libraries, important though they are, are not the greatest asset of the College. The greatest asset of the College is its spirit, the spirit of the Master whose name it bears. 'In Hoc Signo.'

Dr. Meston alluded to the hopes of the College. No educational institution could do for its students all that it would wish under the conditions now prevailing. Georgetown is an admirable place for commercial interests. But as the Principal reminds us, 'the godown transactions of Messrs. Wilson and Company on one side, and the sheet iron and pipes of Messrs. Jivaji and Company on the other' are anything but a healthful atmosphere for academic life. We are planning for a future that will be unhampered by distractions of this type, and that means larger and airier surroundings, and greater freedom for the various aspects of collegiate education. Present and former students alike will share in our hopes, and will follow with interest every step that is taken in the way of development and advance. To every son of the College we would say, 'Your Alma Mater is counting on your loyalty and support. In her plans for the future, we are sure you will not fail her.'

The Ideal College

'Diversities of gifts, but the same spirit'—that phrase of St. Paul's well sums up the qualities of the ideal college of which we sometimes dream, and which we would fain take as a pattern for our own college. 'Diversities of gifts,' because one of the most valuable and one of the happiest features of college life is that it brings together people of such different types. Within certain limits, no doubt—but they are wide limits—you have the utmost variety of temperament, and personality, and capacity. This congregating together of diverse types is of the essence of the idea of a college. But there must be something more, if your college is going to be a *real* college. 'Diversities of gifts' says St. Paul, '*but the same spirit.*' Within

and beneath that diversity, which is so valuable and so enjoyable, there must be an underlying unity of motive and purpose.

Let us make this clearer by indicating some of the main features of the ideal college of our dreams. In the first place, this college is a place where men work. There is no room in it for idlers. The members of it recognize that the opportunity to study means responsibility to study, and they do not shrink from mental and spiritual effort. They know it is their duty to make progress in the life of the mind and of the spirit, and they know that duty is sacred. But, more than that, it is a place where men work together as brothers. The spirit of the place is a spirit of comradeship and common effort. We all know the value and necessity of team-work in games, and surely something of the same spirit must be carried into our work also. It is that spirit which is sometimes described as *ésprit de corps*. It is difficult to define, but it means something like 'a corporate consciousness,' a sense of common aims and ideals and a feeling of corporate honour. It is something like the spirit of a family. The members of a real family are interested in one another and loyal to one another. They are willing to stand or fall together. They do not think of themselves as mere isolated individuals. They have a feeling of the oneness of the family. It is some such spirit as that which animates the college of our dreams. And, finally, this ideal college is a place where men learn the habit of service. The people who come there must learn that he who would be the greatest must become the servant of many.

Devotion to duty, brotherliness, the spirit of service—how are these to be achieved? Not through mere exhortation. It is not exhortation that we need, but inspiration. And that inspiration can come only from a personality who has in himself these qualities we seek. We need the constant friendship of one who can inspire us and lift us above ourselves—and in Jesus we have such a friend. What might it not mean for all of us, if we regularly spent even five minutes each day in the presence of Jesus? He would make us ashamed of all slackness and laziness, for what a sense of duty he had who said, 'nevertheless not my will but Thine be done.' And he would kindle the spirit of brotherliness in our hearts, this one who was the friend of the friendless and the shepherd of the strayed. And what a leader he would be in the way of service, for he himself 'came not to be served, but to serve, and to give his life a ransom for many.' And so our ideal college would be a college whose soul was Jesus. All the diversities of gifts belonging to it would be used as the spirit of Jesus dictated, consecrated to him, sanctified by him. In such a place, there would be an influence that could be felt, and, even here is there not already some such influence? Is there not an influence—call it, if you like, the influence of tradition—which we owe to men who long ago lived and worked in this place, being wholly given unto Jesus? It is the influence of the spirit of Christ. But how much stronger that influence might be if only we were, all of us, truly inspired by the same spirit!

We have been discussing what might be described as the 'atmosphere' of the place. 'Atmosphere' is a subtle essence, but it is none the less something very real. It depends partly, as we have said, on tradition—and we are not lacking there.

But it depends partly also on the contributions which are made here and now by individuals. Do we realize that sufficiently? Do we realize that each one of us, by simply being what he is, affects somehow or other the atmosphere of all our common life? Let each older student ask himself. 'What contribution have I made to the atmosphere of this place? Have I in any way helped to make it, in the best and largest sense, a Christian atmosphere? Have I been an influence on the side of conscientious work, and generous brotherly relationships? Have I begun to learn the habit and to spread the spirit of unselfish service? And if I have not made any worthy contribution, what is the reason?' The reason may be that you have not allowed yourself to become the instrument of the spirit of Jesus, for he can determine the spirit of a man's whole life, nourishing it at the central springs of character.

A college in which the master-spirit would be the spirit of Jesus, that is what we are looking for—a college whose very atmosphere would be a rebuke to slothfulness, and selfishness, and any kind of meanness. And this college can become such a place if only, in a quite simple and practical sense, we are willing to become the friends of Jesus, to learn of him, to be influenced by his spirit. Shall we, in the proud and happy fellowship of this college, together set out on this adventure of the spirit?

A Correction:

Will readers of the Magazine kindly note that on page 158 of the July issue, in the quotation near the bottom of the page, Rs 76 lakhs should read Rs·76 lakhs. The error occurred in the printed report from which the quotation is made. Dr. Meston desires the two subsequent sentences to be deleted in view of this correction.

What Men Think

Let Me Lose Count

LET me lose count of all my sorrows, Lord,
And even my joys; oh, let me number not
These, nor measure out my lot;
Nor say, 'Here it fell short,' 'There it was large or small,'
'Here did the mercies thick or scantly fall.'
Teach me to watch the countless heavens instead—
Unnumbered;
Who reckoneth thy stars?

Let me not measure anything;—nor this
The cup that in my shaken hand holds all
The sweet of life, and all life's bitterness;
Let me not call its bowl
Or deep or shoal;
Calm, unafraid,
Teach me to look upon the Sea which Thou hast made;
Who soundeth it or plumbeth it, O Lord?

Let me not weigh the gift I give or take;
Nor call one great, nor mourn the other small;—
Exalt, abase myself nor any man. Lord, break,
Break Thou my measurements,
And put them far from me.
Take numbers, measures, reckonings away;
Leave me instead the countless stars, the boundless Sea,
The imponderable Night, the veiled and gifted Day,
And Death beneficent that waits on Thee—
Thee, Lord, whose gifts no man may mete nor weigh;
Who measureth Thy love and mercy, Lord?

LAURA SPENCER PORTOR.

Puja: its Meaning and Etymology

In The Indian Antiquary for May and July of 1927 and August, 1928 there are three articles that deal with the meaning and etymology of the word, *puja*. The first two are by Professor Jarl Charpentier of the University of Upsala. He refers to the fact that many students of etymology as far as it relates to Sanskrit are content to consult the St. Petersburg dictionaries, with no further critical

consideration of the matter of the origin of the words. In the case of the word *puja* we do not get much help for the noun seems to be primary, and the verbal root *puj* is undoubtedly secondary. Prof. Bartholomae tried to establish a connection between *puja* and an old Iranian word, *baxsaja* from which the Persian word, *bakhsudan*, to be gracious, to forgive, is derived. But Charpentier thinks that neither of these suggestions is attractive. He reminds his readers of suggestions emanating from Gundert and Kittel that the root of *puja* is Dravidian, being allied to the Tamil, *puçu*, the Kanarese, *pusu*, and we might add the Telugu, *puyu*, meaning to smear, to daub, to paint, to put on sticky substances. Charpentier draws our attention to the familiar fact that in the Hindu temples of our day idols are treated like earthly monarchs and dignitaries, being smeared with sandal-paste, ointments, etc., in addition to being bathed, perfumed, dressed, fed, adorned, and adored with incense. These are the very practices which make up the daily *puja*, the bathing and smearing of the idol being the central part of the worship.

The learned professor thinks that undoubtedly such practices as we now find, particularly connected with Dravidian deities, were in vogue even prior to the writing of some of the Rig Vedic hymns. Now-a-days the idols are smeared with red and yellow powders. It has been frequently suggested that the use of the red powder is a survival of the days when the smearing was with blood, and that as human and animal sacrifices diminished, and men became repelled by the use of blood, they substituted a powder that would have the same colour as blood. There is no doubt of the prevalence of the use of blood in olden times, and of the belief in its vitalizing influence over the deity to be conciliated. Charpentier thinks that red powder is not to be understood as a substitute, but rather that the use of the two side by side was in vogue from ancient times. Association by similarity of colour probably played its part in the original adoption of the red powder. We know that even to-day the two are still used side by side where animal sacrifice is practised. The notion is magical, and suggests a means of placating powers with evil power and intent.

A very suggestive reply to Professor Charpentier comes from the pen of Mr. Chintaharan Chakravarti. He asks the question as to whether Charpentier has really hit upon the important element in the *puja* of the idol. He doubts whether it is the daubing and smearing with ointments and powders, and suggests instead the offering of flowers. He gives it as his opinion that the offering of flowers is regarded as the more important of the two parts of the rite. M. Collins in *Dravidian Studies* Nos. I—III published by our own University has associated the Sanskrit *puja* with the Tamil *pu* meaning flower. The Tamil has also the word *puci* meaning 'to offer flowers.' This derivation, if established will point to the offering of flowers as the original connotation of the word *puja*, and also the principal part of the observance.

The Criminal Mind

A most careful and thorough investigation of criminal mentality has been carried on for a number of years by Dr. William J. Hickson who is Director of

the Psychopathic Laboratory of the Chicago Municipal Court. A recent number of *The Literary Digest* gives a brief account of his work, and excerpts from an address given before a Race Betterment Conference. In twelve years time Dr. Hickson and his assistants have examined over 40,000 criminals, and have made use of every device known to science to study their minds, emotions, nerves, physical equipments, heredity, and personal histories. Some of their findings are as disturbing as they are enlightening. They have found that this class multiplies far more rapidly than more intelligent people, and is giving children to American society five times as fast as the highly intelligent. That means the perpetuation and increase of criminality, for eighty-nine per cent of criminals are discovered to inherit their tendencies from their forebears.

Their experience with children indicates that they can detect embryonic criminals with unerring certainty in early years. Their segregation would relieve society of potential menaces, but at present there is no legislation by which such measures can be effected. Dr. Hickson's laboratory has examined youths in a number of cases, and made positive predictions that unless isolated, they would commit murders, and they committed murders later on, as the psychopathologists predicted. The cause is to be found in defective intelligence, and defective emotional ability. If children are born to defectives, all the cultural environment in the world will not give them normal minds. One of the wealthy families in Chicago tried the experiment of adopting a baby born to a pair of unfortunates, the father a drunkard and the mother a prostitute. He was given the best opportunities available in good schooling, cultural environment, and a comfortable home. But he became a burglar, robbing even his foster parents and their rich friends. He is now serving a penitentiary term.

Dr. Hickson urges that a new and more scientific basis needs to be adopted for the treatment of criminals. Punitive methods have failed, for as soon as a criminal of such defective mentality is released from serving one term of punishment, he commits some other depredation. Neither is unenlightened good-will of any service. Treating criminals like sons and brothers does not seem to have any effect in preventing or stopping crime. And the reason is the constitutional defects which are bound to express themselves. The modern economic conditions of life, particularly in America where there is so much prosperity only gives the criminal class a better chance than ever. The result is that bad heredity is in the ascendant, and good heredity on the wane. Human society is positively menaced by the ascendancy of the unfit and defective. In order to check this deplorable tendency, science has two recommendations to make: 1. Segregate congenital defectives before they have an opportunity to commit crimes. 2. Make it impossible for criminals to reproduce their kind. It is estimated that about two per cent of the population is mentally defective. It is also estimated that two per cent of the population shows criminal tendencies. Investigation demonstrates the fact that this is not a coincidence, but a correlation. 'It is the same two per cent.' And this same two per cent absorbs about thirty-five per cent of the money raised by taxation, and keeps the remaining ninety-eight per cent of the

people on pins and needles all the time. The time has surely come when society and the State should recognize the special characteristics of the criminal mind, and act accordingly. Otherwise the outlook is dismal.

Vitamin E

Recent studies of dietary requirements have shown that a diet may be sufficient for normal growth, but deficient for reproduction and lactation. Extensive investigations of this new type of sterility have shown that it is due to the absence from the diet of a vitamin which has been called vitamin E. This substance is found only in very small quantities in animal foods, including milk, the two richest sources of it so far discovered being lettuce and wheat-germ oil. It appears to be similar in chemical nature to vitamins A and D. It is fat-soluble and remains in the unsaponifiable fraction of wheat-germ oil. It is not destroyed by cooking and is resistant to aeration and hydrogenation. When wheat-germ oil is fractionated in *vacuo*, vitamin E is concentrated in the portion distilling between 225° and 230° C. It contains no sulphur, nitrogen or halogen. In experiments with rats fed on diets free from this substance but otherwise adequate and containing the other vitamins, it was found that although the animals grew normally they were unable to reproduce. In the case of females, they showed the oestrus cycle and became pregnant, but on about 20–25th day of gestation the young began to be reabsorbed and never came to birth. It was found that the fertility of female rats could be restored by the addition of about 0.5 grm. of wheat-germ oil to the food on the first day of gestation or by a daily dose of 25 mg. In the case of the males, however, a diet free from vitamin E resulted in the degeneration of the reproductive system and subsequent prolonged administration of this substance did not result in a cure in most cases. A number of observers have noted the failure of reproduction on synthetic diets, but it is chiefly due to the work of H. M. Evans and his co-workers in the University of California that the definite results summarized above have been obtained.

Atmospheric Ions

Students of physics and chemistry have long been familiar with the idea of ionization. The commonest type of ionization is that taking place when certain compounds are dissolved in water. The molecules of these compounds on solution in water break up, in the simplest case, into two parts, one of which carries a positive electrical charge and the other a negative charge of the same magnitude. Such charged particles are capable of independent movement and were named ions (wanderers) by Faraday. Ions exist not only in solutions but also in gases, and in this case they may be derived from elements as well as from compounds. The motion of an ion through a gas is very similar to that of a solid particle through a viscid liquid; its rate of motion will be uniform and will depend upon the strength of the driving force, the area of its surface and on the nature of the liquid. The number of ions in a certain volume of gas can therefore be easily estimated by measuring its electrical conductivity. Two parallel plates are charged to a known

potential and the current passing between them is measured. It is found that gaseous ions accumulate round themselves molecules of water and other compounds, and dust, smoke and other particles, and thus become complex ions. These complex ions because of their larger surfaces will travel more slowly than simple ions and so a gas becomes a poorer conductor when its ions become complex. Some interesting effects of this kind have been obtained by Prof. A. M. Tyndall and R. L. Phillips with alcohols. In each of the normal alcohols of the paraffin series there is a chain of carbon and hydrogen atoms with an OH group at one end; such molecules may be regarded as having an active head and an inert tail. These molecules are attracted by negative ions and become attached so that their heads are inward and their tails spread out radially. The effective size of the ion will thereby be increased by an amount depending upon the length of the carbon chain. Experiment shows that for a given pressure of alcohol vapour the mobility of an ion decreases rapidly with increase in length of carbon chain. In the case of amyl alcohol (5 carbon atoms), one part of alcohol in 300 of air reduces the mobility of the negative ions in air to forty per cent of its normal value. If water vapour is introduced as well as alcohol there is competition for places on the available ion surface, which results in some short water molecules replacing some of the longer alcohol molecules. As a result of this we should expect a rise in mobility, and this is what is observed. It would be expected that if the molecules were made non-polar by removing the OH group, their tendency to cluster round the ion would disappear; experiment shows that decane (10 carbon atoms) has practically no effect on the motion of ions in air. If relatively large particles are introduced into the air, the ions become so heavily loaded that their motion becomes very slow. Tobacco-smoke is found to destroy almost completely the conducting power of air. When ions are driven through air by an electric field they drag the air with them—a phenomenon which at electrified points gives rise to what is known as "electric wind". If highly electrically charged points are present in a smoky atmosphere the electric wind assists in carrying the charged smoke particles towards surrounding surfaces where they stick. This is the principle of electric smoke precipitation. A knowledge of the behaviour of gaseous ions is of very great importance to meteorologists in studying cloud-formation, atmospheric electricity, and related phenomena.

The Physiological Effects of Flying

In two lectures at the Royal Institution in March, Group-Captain Martin Flack gave an account of some of the physiological effects of flying. Air sickness, which occurs in aeroplane flights in 'bumpy' weather, is quite different from sea-sickness and is of much less frequent occurrence. Neither is there any connection between air-sickness and liability to giddiness when looking down from a height. In ordinary aviation the machines do not ascend high enough to induce anything akin to mountain-sickness. The altitudes ordinarily attained are not sufficient to harm people suffering from lung and heart ailments of such a degree as to enable them to pursue an average everyday life on the ground. The only effect noticed at

moderate heights is the expansion of the air in the middle ear, but, except when there is catarrh of the Eustachian tube, adjustment automatically occurs by swallowing. In coming down, the reverse adjustment is easily brought about by forced expiration. The pressure changes are never sufficient to cause the liberation of gases from the blood plasma.

As long ago as 1786, the stimulating effect of moderate altitudes (up to 10,000 ft.) was recorded. In a book on aëronautics published in that year, the author states that all worries disappear as if by magic and 'the spirits are raised by the purity of the air and rest in a cheerful composure.' This effect is often noticed in flying, many pilots stating that they experience a great desire to sing. At greater altitudes, 12,000 ft. and upwards, liability to mountain or altitude-sickness increases although many constitutions can tolerate altitudes up to 18,000—19,000 ft. without much discomfort. This sickness is due to anoxaemia or deficiency of oxygen. More important to the pilot than its external effects are its effects on the mind and nervous system of which he may not be aware. The perception and judgement become dulled and muscular weakness sets in. Nearly all pilots notice a tendency to somnolence and many have difficulty in finding their way, being able to see the ground but not to read their maps, and finding even the slightest effort, such as pulling a lever or camera-release difficult. This effect has long been known. Glaisher in 1862 in a balloon ascent, noticed that at 26,000 ft. although he could see his instruments, he could not read them. Shortly afterwards he became paralyzed in his hands, as did his assistant, who however, managed to pull the valve rope with his teeth. The administration of oxygen entirely prevents anoxaemia, and all pilots likely to go up to great altitudes now carry oxygen apparatus. The use of oxygen is found to keep a man alert; it gives him more power to control the aircraft, abolishes nausea, headache and lassitude, and also helps to keep the body warm.

Book Reviews

ELEMENTARY PSYCHOLOGY. By Prabhu Dutt Shastri, M.A., PH.D. Calcutta: Longmans Green & Co. Ltd., 1928. Pp. xi. + 156.

There is a distinct place for the introductory text to a science, like psychology, as well as for the more complete treatment of the larger volume. This valuable little volume by Dr. Shastri of the Punjab University serves the purpose of an introduction, as well as a summary of the subject, useful to the student who desires to review the subject rather hastily. As is inevitable in a book of such short compass the more serious student is rather irritated at the scanty treatment of most subjects, but allowance must be made for the purpose of the book. It is rather surprising to find such an important subject as the learning process left untouched. As far as it goes the treatment is clear, and the point of view is moderate, running neither to the extremes of behaviourism nor to the exclusion of experimental data.

LAW APPLICABLE TO CHRISTIANS. By Paul Appaswamy, M.A., LL.B. Madras: Christian Literature Society, 1928. Pp. viii. + 310. Rs 2.

This is a handbook prepared at the request of the National Christian Council. The book is primarily intended for the use of missionaries, is a compendium of the law relating to Christians in India, and the author hopes that it will be found useful to members of the Christian community as well. The idea seems to be to give the ordinary layman a fair notion of law. The book begins with a definition of law and its main divisions, and goes on to describe the sources of law in India. The author has, therefore naturally brought into the volume several matters having no direct applicability to Christians alone. There is no doubt that a lack of knowledge of the elementary rules of law has led missionaries into very regrettable mistakes and the author has in this small volume given a fairly full summary of law on all matters that are of importance to missionaries. The law as to majority and guardianship of minors is pretty thoroughly dealt with; and so also laws relating to marriage, divorce, and the effects of conversion. The Law of Succession is a wide subject and is embodied in the Indian Succession Act XXXIX of 1925. A complete commentary on the subject was not possible for the author within the space permitted to him. He has however, given a complete summary of the important provisions of the Act sufficient to give the lay reader a correct idea of the Law of Succession. In his references to the Law of Succession in England the author seems to have overlooked the radical changes brought about by the Law of Property Legislation of 1925 popularly known as Lord Birkenhead's Acts under the provisions of which, on inheritancy, property real and personal devolve in exactly the same way. We would invite the attention of those interested to the very thorough treatment of the subject of conversions and its effects on the

status of the convert, and the references to decided cases will be found both useful and interesting. Although a full treatment of the general law applicable to Christians along with all others was impossible, the author has done well in giving a summary of the Law of Arbitiation. It is to be hoped that members of the Christian community would increasingly make use of arbitration as a means of settling their differences. In India it is apparently impossible to write on any subject without introducing topics of political controversy; the character devoted to citizenship contains not only a statement of the position of the Christians in the present Indian constitution, but also a discussion of the arguments for and against communal representation. In this chapter is recalled the disabilities under which Christians laboured in the earlier part of the British rule. The book also contains short statements of the law of property with special reference to trusts and trust properties and the main provisions of the Registration Act. A few forms of conveyancing given in the appendix will no doubt be found useful. The author has to be congratulated on the good work he has done for the missionaries and the Indian Christian Community. We would even venture to state that the book will be a useful addition to a lawyer's library.

REPORT OF THE UNEMPLOYMENT ENQUIRY COMMITTEE: TRAVANCORE—1928. There seems to be a feeling of uneasiness all over India to-day that the present unemployment prevailing amongst educated classes needs to be investigated. This report is one of four such reports, all issued recently, and all bearing a remarkable likeness in their findings. Taken together these four reports give the reader a good idea of the seriousness of the problem to be faced. India to-day is too uncomfortably full of educated unemployed, and the reasons for this will have to be faced, the sooner the better. This report faces the problem as fearlessly as any, we think.

The Travancore Government has included Vernacular S. L. C. holders amongst the number of educated unemployed, and this is a brave thing to do, for after all such boys are merely Third Form boys, and can really be said to be merely commencing their education, rather than completing it. In the estimates of unemployment therefore found in Travancore the V. S. L. C. holders top the list with 39·9 % of their number unemployed. Unpassed men from the Arts Colleges come next with 24·5 %, English S.L.C. holders (Form VI) have 19·8 % unemployed, and graduates 4·4 %.

The number of posts available for educated men is small. About 820 vacancies occur annually in Government service, teaching offers 480 posts and in business about 120 men can be absorbed in each year. In competition for these posts all types of educated men compete, their qualifications ranging from V.S.L.C. to M.A. The number of graduates produced in Travancore in 1926 was more than double that of 1922, and of these 55% failed to enter Government service. Only about 25% of the 1,760 English S.L.C. holders of 1926 could be absorbed in Government service and in private schools, and the unedifying spectacle is seen of these people competing with V.S.L.C. holders for posts as constables, peons, etc. The number of B. Ls and pleaders increased by nearly 50% between 1922 and 1927, whereas

the number of suits increased only by 12%. The result of this is that B. Ls of 3 and 4 years standing are seeking clerical appointments on Rs 25 or Rs 30 per mensem. Whereas the Madras Unemployment Committee stated that the proportion of educated men to demand was 2 : 1, in Travancore it is more nearly 3 : 1.

The chapter dealing with the causes of this unemployment is very interesting. Overpopulation stands first, for Travancore suffers greatly here. Then the tradition of literacy amongst the Tamil Brahman, Nair and Syrian Christians has meant a monopoly for these classes in the professions and official service. With the years the supply has far exceeded the demand with the result that these classes, with no aptitude for trade are left unemployed. There is also a drift from agriculture, Travancore is a land of small holdings and families, grown too big for these holdings, must seek other and more attractive occupations, especially now that the soil has become impoverished by years of manure scarcity. The rise of the depressed classes into the ranks of the educated has further pressed on the means of employment for these people. But perhaps the most potent cause of this flooding of the educated labour market is the pernicious lowering of educational standards all round in recent years, so that certificates and diplomas came to mean less and less as the number of holders of these documents grew more and more.

The recommendations of the committee contain little fresh, that is except perhaps a suggestion for a land colonization scheme for unemployed educated youths. One good suggestion however is made, which will prevent the present excessive number of S.L.C. holders from being much more highly augmented. That is the suggestion that no pupil should be allowed to appear for the S.L.C. examination more than twice and no pupil should be given admission to the same class for more than two years.

We welcome also the emphasis laid on the need for adult education and the suggestion that more funds might be allotted for this purpose. In conjunction with this the establishment of 'continuation schools' for providing vocational and general education for boys belonging to occupational castes is a good idea.

But the report is on much more useful ground when it says that the whole problem is *social* rather than industrial. 'An all round intensive development of the economic resources of the country on modern lines is the best remedy for unemployment' says the report, and ends up its recommendations by reiterating that nothing useful can ever be done until the educated classes 'learn to revolutionize their outlook, to work harder and to become truly productive.' Here lies the crux of the whole problem. When educated men are more willing to work with their hands, to engage in industry and commerce, and what is perhaps more important in India, to take up scientific agriculture and *work it themselves*, then the unemployment of the educated classes of India will bid fair to disappear. India is economically rich, but the exploitation of that riches means hard work for someone.

THE MADRAS FISHERIES DEPARTMENT ADMINISTRATION REPORT FOR 1926–27. More than half of the coast-line of India belongs to Madras Presidency and one is therefore prepared to find that the activities of the Fisheries Department are both

numerous and varied. This report of nearly a hundred pages shows this to be the case. Only a few outstanding items can be mentioned. The most successful activities of the year were the pearl and chank fisheries of the Gulf of Mannar. These brought in a revenue to Government of Rs 3,32,550, the largest income obtained for over a hundred years. The total landings of fish of all kinds during the year approximated to two million maunds and this was valued at nearly fifty lakhs of rupees. The amount cured in the 108 public fish-curing yards was 1,139,000 maunds, and for this purpose 184,000 maunds of salt were used from which the revenue amounted to Rs 2,30,000. In some respects the year was a bad one. The sardine season was practically a failure and consequently the output of guano, fish-oil and fish-manure from the 500 factories licensed by the Department and by the Government Experimental Station, Tanur, were low. Most of the inland fish-farms also suffered badly owing to the failure of the N. E. Moonsoon ; this was specially the case with the Perambur and the Vellore Fort Moat Farms. The Chaliyam Fish Cannery carried on no manufacture during the year and the whole of the stock was sold off at reduced rates, but it was thought that this experiment should be continued as it has yet to perform an important part of its work. The Department has carried out a number of investigations during the year of which the use of sodium hypochlorite, obtained by electrolyzing sea-water, for preventing taint in fresh fish may be mentioned. It has, however, only now begun to organize its research on an adequate scale, a programme of work for the next ten years having been drawn up. To carry out the biological and oceanographical investigations relating to the most important economic fishing problems it is recommended that there should be research laboratories at Calicut for the West Coast, Krusadi for the Gulf of Mannar, Madras for the Carnatic, and Vizagapatam for the Northern Circars. Government have approved generally of the scheme and have called for detailed proposals. It is to be hoped that this project will materialize and that incidentally some of our Honours graduates may have an opportunity to apply their biological knowledge.

BRAHMARSHI KESHUB CHUNDER SEN. By Manilal C. Parekh, B.A. Published by the author, Rajkot: Oriental Christ House, 1926. Pp. xxii + 245. Price: boards, Rs 2, cloth Rs 3.

This is more than a biography. The author has aptly described it as 'a memorabilia of the Brahmarshi of New India.' It is therefore chiefly concerned with the spiritual development of the man, particularly as reflected in his religious addresses. Although long and copious quotations are introduced, the reader never feels bored, but is always glad to have Keshub Chunder Sen speak for himself. As one reads the book, the inescapable conclusion is that here was a brave soul of extraordinary spiritual insight and great power. Keshub was one of the first Indians to feel the rising tide of nationalism, and added to that was his deep-lying idealism. He coveted for his country not simply 'a place in the sun,' but leadership in the sphere of spiritual ideals. Mr. Parekh has given us a book that every young national should read, ponder, and reread. It is a portrait of one of the greatest sons of Mother India, and one that pulsates with rich life.

The strictly biographical details of Keshub Chunder Sen are more or less familiar. His place in the Brahma Samaj under the leadership of Devendra Nath Tagore, and his subsequent withdrawal from the original Samaj and founding of the church of 'The New Dispensation' are well known facts. But Mr. Parekh enables us to see the spiritual struggle that gave birth to each of the momentous steps that Keshub took. The new church that he founded, like the old Brahma Samaj, was syncretistic and theistic, but its eclectic element was more avowedly open. It was Keshub's glory to keep his mind open to the admission of truth from all quarters, science as well as religion, Christianity as well as Hinduism, the Occident as well as the Orient. He found the theism of the older samaj too abstract, too rational and too narrow to satisfy the growing needs of India. He wanted a religion that was more aglow with life, suited to high and low, rich and poor, philosopher and peasant. Thus in his church Christian and Hindu elements flowed side by side. Some of his critics tried to discount his sincerity, and to accuse him of seeking prophetic rank, along with Moses and Jesus. Our author has done a real service in clearing up this matter. He has given the entire relevant portion of an address in which Keshub answered his critics. It is amazing that an author like Dr. J. N. Farquhar should have resorted to the unfair method of quoting incompletely from Keshub, and leaving an altogether false impression. Readers of Farquhar's account in *The Crown of Hinduism* should certainly read pages 122 to 4 in the present work, where Keshub utterly repudiates selfish ambitions in connection with the New Dispensation.

Keshub was one of the first to call attention to the fact that Jesus was an Asiatic, and to claim that India has a greater national right to him than Europe. Asia was the birth place of all the great prophets of religion—Jesus and Buddha, Zoroaster, and Confucius, and Muhammad. Yet a prophet cannot be confined within any geographical or sectarian limits. The acceptance of the spirit of Jesus is a challenge to relinquish all sectarianism, a challenge that Keshub flung at Europe, and tried to embody in The New Dispensaton. Here we have one of the most serious and thoughtful attempts that has been made to present an Indian interpretation of Jesus. Keshub had not the slightest hesitancy in making him the centre of his movement, and in urging upon his countrymen the necessity of giving Jesus the paramount place in the life of the nation. Mr. Parekh has shown us that as Keshub grew in years, his theological views approximated more towards those of orthodox Christianity. Nevertheless he always preferred to remain as a Hindu disciple of Jesus.

We heartily commend this memorabilia of a great Indian. Especially we would urge the rising generation in which the pulse of nationalism beats strong, to read this account of a nationalist who always kept the lamp of his idealism bright and shining. It is such men who make a nation really great.

DEWAN BAHADUR M. KRISHNA NAIR, B.A., B.L.
Law Member, Government of Madras

Students' Section

Cheela the Fisher Boy

The bells on the pillar within the temple! They moved about in the air and were always ringing—pealing for ever the message of Mallikêswara. Those that had ears heard it : but there were probably more that lent a deaf ear to it—ardent followers of materialism, the accepted cult of modern times.

It was dusk. A little away from the pillar, outside the precincts of the temple, stood a young boy of ten years. A beaming countenance was his. His eyes were shut, he was in a trance. His ears had caught the divine message—the message that reinstated him, the message that came down to him with mighty power and saved him from a life in the dirty slums among fishermen.

Ere long he was disturbed by an aged man on the shady side of forty, a little swarthy in complexion, but dark as ink as he stood beside the beaming boy. He presented a very care worn face, and he was of strong physique. ' Now, Cheela,' he said, ' I have been searching for thee all through this town. Why dost thou stand here alone, beside this temple ?'

' Father,' returned Cheela : and there was a sudden flush of emotion evident on the face of Kandan, the elderman ; for the blood suddenly rose up to his face and came down again more suddenly, leaving him pale as a ghost. Cheela noticed this : it grew duskier, and he shook. In quivering tones, he said again : ' Father, I love you : but more than you the One Above, the All-Father. I hear him speak as you do. His message reaches my ears through the bells on yonder pillar. They whisper to me : " Leave this fisherman's hut : some noble work requires thine aid. Leave him. He is nought to thee." '

' Cheela, I was not born a fisherman. When I first took to it, I did not like it. But once habituated, I am as good a fisherman as any other, and as happy. Leave your crotchety notions. They do not become a young boy.'

' But, father, more than the weight of your personality do I feel that of Him who speaks to me not in words but by the ringing of these bells. Remember their words, " you are nothing to me." They seem to me true : and I am determined to leave you. There is a mystery in this, I fear ; pray God I will be able to unravel it ere long.'

Kandan who stood beside Cheela silent, felt like Agamemnon beside Iphigenia when the former had deluded her into the altar under cover of her prospective marriage. Slowly but surely the ruffian spirit came under the influence of God. Neither threats nor requests availed and Kandan softening, pondered awhile. The silver moon had risen by now and shed her sweet light upon them. Two sharp tears fell from Kandan's eyes : and he said, ' Come home to-night, my Cheela dear ; to-morrow morning you can go.'

They walked home in the moonlight—father and son as Cheela thought. The next morning they woke up early. Cheela was fed sumptuously, and was given a small basket of food and fruits. The last words were these, from Kandan, which more than once in the night he had instilled into the ears of Cheela : 'If ever you hear of Narayanaswami Aiyar of Gopalaswamipuram or of Krishnaswami, the son of the said man, enter service under them, for there I served for more than twenty years.' The boy nodded his assent, and trotted off, feeling a passionate glee and optimism, such as was felt by Dick Whittington when he set off to become the Lord Mayor of London.

II

A year passed. Gradually Kandan lost interest in thinking about Cheela. Cheela did not get into permanent service anywhere. He wondered how he managed to get out of his father's house in Madras, and what noble work required his aid. Still he felt the force of the divine message He had faith in it, and he felt he was about to do a great work. Wandering at random in the streets of Kumbakonam, he felt weary and slept awhile in a choultry. When he woke up, he looked confused. 'It's a dream,' he said and rubbed his eyes. 'There's no house here,' he added and rubbed his eyes again.

He then walked at random for about an hour, and came to the New Town where the aristocracy had their abodes. He wondered at the beautiful bungalows, particularly at one, the branches of the trees around which seemed to invite him. It was very fascinating. Unconsciously his steps were compelled towards it.

It was evening. In front of the bungalow on an easy chair lay a young man. He had a cropped head, and wore a pair of spectacles. Beside him was a table on which some of the daily newspapers lay disorderly : and the young man himself was deeply engaged in the perusal of a book. Cheela went and stood before him. Deeply rapt in the book, Mr. Kishen, I.C.S., did not notice him for awhile. When he did, Cheela prostrated before him and said he was a poor boy and would like to be entertained as a servant. Mr. Kishen noticed him keenly, felt an inexpressible sensation creep over him, advanced towards the boy with a fraternal affection, but said to him sharply : 'I must know that thine antecedents are unimpeachable before I entertain thee in my house.'

'I am the son of a fisherman of Madras, Kandan of name. If you desire to know his past, sir, he was not a fisherman by birth. He had served in these parts under Mr. Narayanaswami Aiyar of Gopalaswamipuram.'

Mr. Kishen placed the book on the table, eyed the young boy keenly, got Kandan's address from the boy, and entertained him in his house. He went to his wife and spoke to her in whispers, hied to his room and despatched a letter to his father, Mr. Narayanaswami Aiyar of Gopalaswamipuram. His parents arrived two days thence : whereupon Mr. Kishen left for Madras, on court business as he said.

III

Among the houses of the fishermen at Royapuram, Kandan's was a little imposing. This was inquired after by Mr. Kishen through the help of some constables, asked to do the same without the least frightening them. They also managed to take Kandan to the bungalow where Mr. Kishen stayed. Mr. Kishen saw Kandan, the same old Kandan who had served in his house. Kandan saw his old master and paid his respects to him. Mr. Kishen, with the alertness innate in him, asked Kandan: 'Come home and convince my parents that Cheela is the old Chella, my brother. I pardon you your crime. Come home.' Kandan was taken aback, who till now stood confused and stupid, and would have refused, had not Kishen narrated to him what he then was, and even threatened him with legal action Kandan had no other course but to consent. They went to Kumbakonam.

It was Friday. Cheela, the gardener, was watering the plants, when out of the carriage jumped his master and his father.

'My dear father,' cried Cheela. Kandan burst out into tears.

Mr. Narayanaswami Aiyar greeted his son, but was surprised to see his old Kandan. He grew choleric and inquisitive at once, and asked aloud, 'Now, Kanda, where is my child Chellam?'

'Master, he is already here, by the grace of Lord Mallikeswara.'

Mr. Kishen doffed his coat, and hugged Cheela, crying out: 'Thou, my long-lost brother.' Narayanaswami Aiyar and his wife shed tears of joy. The temple bells there at Kumbakonam rang when Cheela, now Chella, was led into his house, and Chella's heart throbbed again with joy at the hearing of the temple bells.

M. R. SUBRAMANIAM, B.A.
Post-Graduate ENGLISH.

College Notes

The Law Member

THE HONOURABLE DEWAN BAHADUR M. KRISHNA NAIR, whose photograph appears in this issue is a distinguished 'Old Boy' of the College. His appointment as Law Member of the Government of Madras was announced in the July issue of the Magazine.

King's Birthday Honours

THE KNIGHTHOOD CONFERRED UPON THE Honourable Khan Bahadur, Sir Muhamad Usman Sahib is a fitting recognition of unselfish public service. Our hearty congratulations to him. We congratulate also Dewan Bahadur W. L. Venkataramayya, Rao Bahadur P. I. Verghese, Rao Bahadur V. N. Visvanatha Rao, Rao Saheb M. K. Verghese and Rao Saheb H. Narayana Rao on the distinctions conferred upon them.

We note with pleasure the appointment of Sir K. V. Reddi as India's Delegate to the Council of the League of Nations' Assembly and the choice of Mr. R. K. Shanmugam Chetty, M.L.A. as advisor to India's Representative at the Inter-national Labour Conference at Geneva.

College Hostels

THE FOLLOWING STUDENTS HAVE BEEN elected secretaries for the year by their respective hostels.

The Students' Home ...	... Mr. A. Ganapathy Rao.
The Second Students' Home	... Mr. K. Narasimharaghavan.
The Fenn Hostel ...	... Mr. Daniel Vijayarangam.
The Caithness Hall ...	... Mr. M. Chellappah.
The Rungiah Chetty Hostel	... Mr. R. Satagopan.
The College Park Hostel ...	... Mr. K. Kuruvilla Jacob.

The, Inter-hostel Debating Society

THE DEBATING SOCIETY PROMISES to become an attractive feature of hostel-life. The new Constitution and Rules of Procedure have been carefully drawn up providing for that mental discipline which debating societies ought to secure, but generally lack, viz., the discipline of self-control, effective thinking and brief but forcible presentation of arguments. The special aim of this society, as set forth in the constitution, is to develop a high standard of debating power by insisting on the rigid observance of brief time limits of speeches, in order that members may be trained to select the most telling arguments and to present them concisely and pointedly.

According to the constitution the chairman shall always be a student-member and strict obedience to the chair is insisted upon.

We are glad to learn that four successful meetings, under the new rules, have been held so far. We hope that the members of the College hostels will take full advantage of the training that this Debating Society offers.

The Christian Union

The Christian College Christian Union. The inaugural meeting of the above Union was held in the College Hall on Thursday, 19th July, Dr. W. Meston presiding. Mr. P. C. James, the secretary, presented his report for 1927-28 from which we take the following. Devotional meetings were held regularly on every Wednesday in spite of the poor attendance of members. Two study-circles, one consisting of ten members and the other of seven, met every Sunday night at the Fenn Hostel under their respective leaders. Mr. Theodore, the president of the Union, and the other office-bearers did not spare themselves in their efforts to make the Union really helpful to students. It is regrettable, however, that larger members of the Christian students are not taking advantage of this institution which is a definite source of spiritual inspiration and edification. Mr. Jonathan of the Second Calss welcomed the new Christian students. He asked them to serve the College and themselves by actively sharing in the spiritual benefits which the Christian Union was offering. Mr. Prakasa Rao of the First Class in responding to the welcome thanked the Union and promised co-operation. Mr. Poore the speaker of the evening said that he was a fresher himself, but could realize what a power for good the College Christian Union was. He referred to some of the privileges—intellectual and spiritual—that membership of the Christian College implied. The chairman in bringing the proceedings to a close exhorted the members to see to it that the Christian Union kept alive within the College, the spirit of the Master. He said 'the question is not whether our religion is great or not, but what it is doing for you and me.'

The College Brotherhood

Under the auspices of the College Brotherhood, the pleasant annual function of welcoming into the Brotherhood the new students of the College was held at College Park on Saturday, July 28, at 4 p.m. The attendance at this year's ceremony was larger than usual, both the staff and the students being represented in considerable numbers. The first part of the programme consisted of tea and sports. The sports competitions were held in the spacious playing field of which College Park is justly proud. An interesting foot-ball match, which ended in a pointless draw, brought the first part of the evening's programme to a close. The meeting of the Brotherhood was held under the College Park margosa tree. Mr. E. Barnes, the president, occupied the chair. Mr. Barnes spoke of the aims of the Brotherhood and incidentally mentioned some of its recent activities including the Brotherhood camp held at Ketty in the Summer. Mr. Narayaniah, the secretary, in his address of welcome, referred to the spirit of co-operation, comradeship and mutual helpfulness fostered by the Brotherhood and invited the new students to share in the service the Brotherhood had undertaken to render. Mr. Pothan

Abraham of the Third Class and young Ramalingam of the First Class made suitable responses, the latter winning a prize for his speech. The pleasant function terminated with a few words from the chairman.

The College Literary Debating Society for Intermediate Classes.

THE COLLEGE LITERARY AND DEBATING SOCIETY for Intermediate Classes has evidently entered upon a busy year, as many as four meetings having been held already. This is probably due to the enthusiasm of the new secretary, Mr. S. S. Sebastian of the Second Class. The inaugural address was given by Mr. Poore, the new professor of English. At a subsequent meeting Mr. A. Ramaswamy Mudaliar, B.A., B.L., Editor of *Justice* and a distinguished 'Old Boy' of the College delivered an eloquent speech on 'Liberty, Equality and Fraternity'. He explained the religious, political and social implications of the three words and pointed out their limitations in practice. He made a strong appeal to students on behalf of the village communities.

The College Malayala Samaj.

THE INAUGURAL ADDRESS OF THE COLLEGE MALAYALA SAMAJ was given by the Honourable Dewan Bahadur M. Krishnan Nair on Monday, 27th August. Besides the Malayalee Students and members of the College staff, a few friends from other Colleges in the city and a few Malayalee officials were present. After tea and light refreshments had been served the President of the Samaj introduced the Hon'ble Dewan Bahadur Krishnan Nair to those present and requested him to deliver the address. In the course of an interesting and humorous speech the Dewan Bahadur recounted some of his happy student-day experiences at the College. He advised the members of the Samaj to be good to those among whom they lived and to put into practice in every-day life the great truths they were learning at the College.

The College Prize-giving

As has been customary from ever-so-long ago the College prize-giving ceremony took place on Friday, 24th August, the day following the convocation of the University. Besides the students, the new graduates and members of the College staff, there were present Mrs. Meston, Mrs. Hogg, Mrs. Woodburne, Mrs. Manikam, Mrs. Dwyer, and the secretaries and some of the members of the College-Day Association. The Hon'ble Sir Muhamad Usman Sahib, Member of the Executive Council, Government of Madras, presided.

The annual address was given by the Rev. G. Mathews. In the course of a thoughtful and interesting speech Mr. Mathews mentioned two possible dangers of taking prize-giving too seriously. There was the danger of looking upon external things as prizes of life. The prizes of life were within us and not without. The second danger was the belief that prizes were awarded on real merit. It was possible, sometimes, to win prizes without possessing the required merit. He however could not but look upon the College prize-giving as a serious business as most of the prizes given were memorials to some great benefactors of mankind, while others were either tokens of gratitude or marks of affection and loyalty.

Dr. Meston, the Principal, presented the following annual report of the College.

Ninety-one years have passed since this College came into being. But the older it grows the younger it becomes. The vigour of its students seems never to diminish. On its staff the place of those who have seen many years of service is taken by those who have the advantage of abundant energy, its graduates pass in their hundreds before successive Chancellors of the University to claim in the days to come no small place in the life and progress of this Presidency, and the schemes for its development are for ever receiving attention so that in new surroundings the College may enter on a new phase of life undistracted by the godown transactions of Wilson & Co. on one side and the sheet iron and pipes of Jivaji & Co. on the other.

Our staff, since last we met for our prize-giving, has experience the changes which are the indication of life. Among our Professors, Dr. Moses returned to us last September with a Doctorate of Philosophy on which we heartily congratulate him. Dr. Hogg came back in May to exchange the rigours of Caledonia for the warmth of Madras, which on the day of his arrival sent the thermometer up to the highest degree that this year has witnessed. And the First Term had just begun when we welcomed Mr. Poore, rich in academic distinction and in intimate acquaintance with the mysteries of the English language and the glories of its literature. Only three went from us: Mr. Symon in March after completing with much acceptance the period of service for which he came out; Mr. Henderson on furlough in usual course, with the result that we are not all looking up to him to-day; and Dr. Cornelius at the close of the academic year after filling for two years a valued place in the department philosophy. Among the Lecturers we are glad to have back with us our old and tried friend Mr. Subba Rao, while Mr. Chakravarti after a distinguished career comes to strengthen the Chemistry Department. From the ranks of the lecturers we miss Mr. Satagopan, now a professor in St. Berchman's College and Mr. A. C. Subrahmanyan at present undergoing training in Saidapet. We remember with gratitude all that they did for the College while on its staff.

We are glad also that through the offices of reader and demonstrator we are able to keep with us for a little our graduates Messrs. Dharmaraj, Rajabushanam and Devadasen.

At this point I wish to say with what smoothness all our arrangements for an additional year of vernacular study have worked. This happy result is largely due to the able direction of Mr. Rajagopala Rao, scholar and administrator, and in every way worthy of the title which has been given to him of Senior Lecturer. It is also due to the most capable way in which our language staff has shouldered its responsibilities. I would assure them of most grateful thanks. To strengthen this side of our work there came Mr. Sargunar, with his well-known and scholarly knowledge of Tamil; Mr. Venkatakrishna Rao, an Honours graduate who throws himself with infectious enthusiasm into the teaching of Sanskrit, in place of Mr, Krishnaswami Aiyangar whose form familiar to us for over twenty years we

miss from our midst; and Mr. Achyuthan Nair one of our own graduates, of acknowledged capacity as a Malayalam scholar, who takes the place of Mr. Vasudeva Poduval, now of the Travancore Archaeological Department. In the course of the year the title of Assistant Lecturer was given to Mr. Narasinga Rao, who has worked so steadily for Kanarese, Mr. Venkatakrishna Rao, and Mr. Achyutha Nair. To our regret Mr. Wahid died in May and in his place there came on our staff Mr. Sheriff who carries into his teaching of Urdu the energy which characterized him as a physical intructor.

And this reminds me that we are now doing a new thing, we are training up a Physical Director for the College. At least Mr. Buck is doing the training and we are responsible for the appointment. You may be sure that when Mr. C. A. Abraham comes to us full-fledged next year there will not be a single student who takes his exercise by proxy, or the normal condition of whose back is like a part of a bicycle wheel, or who needs four limbs to support him when he stands in class.

We follow with our grateful thanks Dr. Asirvadam who resigned his position as Medical Officer of the College in June, and whose timely warnings against fowl curry will long be remembered. In his place we welcome Dr. Mathuranayakam, a former student, now our full-time doctor.

With the Michaelmas holidays of last year there went from us one who was almost an institution, I mean Mr. T. N. Cunnooswami. I was indeed sorry to part with so capable a secretary to the Principal; but he had earned a rest after more than forty years devoted service. My only difficulty is: Has he got it in him to take a rest? In his place we are very happy to have Mr. J. D. Asirvadham with his acquintance with both school and college, and his administrative experience.

Before passing from the staff we take the opportunity of congratulating Dr. Venkataramanaiya, on his having received his doctorate. We are glad for his own sake and for the touch of colour which his robes lend to to-day's proceedings.

The University treated us very generously this year, and we have every reason to be thankful for our satisfactory results at the Intermediate, B.A., and B.A. (Hons.) examinations. One hundred and twenty graduates from this College passed before H. E. the Chancellor yesterday, and four of them gained University prizes. Thanks be to our staff for these results of its hard work.

In other ways its hard work is also shown. Not by those who fail to put in a parade because of a headache carefully tended or an engagement which it would be death itself to neglect—not by these, for they are now to be drummed out of the U.T.C, for a sham service to their country; but by those who, under Mr. Boyd's leadership, have reaped an abundant reward from the camp at Bangalore, from their daily training, and from their inter-company competitions. These products of hard work will be of some real use to their country in the days to come: and in the present year they must win the Willingdon Shield.

Look again at what is being done in our hostels. What an amount of hard work is being expended by Mr. Manikkam and Mr. Rajasekharan, Mr. Bingle and Mr. Sabhesan, Mr. Theodore and Mr. Subrahmanyam, Dr. Hogg and Mr. Cheriyan,

Dr. Moses and Mr. Kibble not only in making these hostels real homes, but also in making them training grounds for the great art of self-government. The response is most gratifying; the Georgetown hostels are full; College Park forms a large and happy family; once more the bond of union was tightened by the annual moonlight dinner attended by the members of all the hostels. And the latest development is an inter-hostel debating society which, thanks largely to Dr. Hogg, provides every fortnight an abundant feast of reason and a flow of soul which is terminated only by a pitiless bell.

Look again at what is being done on our playing fields. There is no afternoon in the whole academic year which has for me any attraction comparable with that of the afternoon on which our College sports are held. Indeed I must say that our Commemoration Day, with its combination of work, prayer, and sport, is one of the happiest days that the College knows. Perhaps you will say that it is easy for me to enjoy the afternoon of the sports when I do nothing but look on and take my tea with other members of the staff. I admit it. The picture of that afternoon includes jumps and races and scenic effects and surging crowds, and also Mr. Barnes and Mr. Matthews and Mr. Sabhesan and Mr. Joshua with streaming brows, partaking of Mercury's fleetness, and certainly being present in two places at the same time. But if they do cast an eye on lazy me it is only in pity of my inaction. Besides what is done on their own playing field there is much that is done by our students on other fields as well. The Wilson Cup for football has been won a second time; the Inter-collegiate hockey championship has been held for a second year; like brave Horatius Thomas won the swimming competition; and the Cricket Club gained one match. The tennis club went on its own happy way week after week, undisturbed by the tournament habit, and closing its year with a delightful at home on the tennis courts. The first challenge cup for the best athlete for the second year in succession was won by A. Eling. Surely if collegiate tournaments encroach on the real sport of the College as a whole, non-collegiate tournaments are very definitely to be eschewed. What energy you possess be sure that you place it at the service of the College so long as you belong to it.

Then look at the Library and think of the very large amount of work that is done there to meet the increasing and ever increasing demands of our eager students. We miss Mr. Chidambaram Pillai this year, but gratefully remember what our shelves owe to him. Mr. Bingle and his staff seem to give themselves but little rest in their thick-walled domain, content if they may issue, bind, watch, and steadily add to their large collection of over 20,000 books.

And look at our *College Magazine*, the large circle that it reaches, the amount of fresh material it contains, the illustrious old boys gallery which brightens it, and let us thank the Editor for this happy link between the present boys and the old.

All these activities are here at work; but they have not a few difficulties with which to contend, you may be sure. For instance, our playing field is held on very precarious tenure. Then any one who looks at our classes between 2 and 3 on a Wednesday afternoon realizes at once that our accommodation is being strained to the utmost. Further expansion is barred to us. We should like to take up

Chemistry as a main subject. In Mr. Barnes we have the man, in our exchequer we have the money, but in the college we have not the room. Our class rooms are full, but are too small for the numbers who would fain enter them. If practically 200 were admitted to Class I, another 100 all of them quite as good, some of them better, had to stand aside, and 100 not far behind could receive no consideration. And then there is the difficulty which we share with states and empires—that of making ends meet. It is sometimes said that this is a comparatively easy matter for an aided college. We are told that it has only to put down one rupee and Government will put alongside of it another rupee, in certain circumstances it will actually put down two. Bring such a statement into touch with fact. To maintain this College during the year 1927-28 required Rs 2,38,991. Endowments gave us Rs, 6261 ; Fees brought in the substantial amount of Rs 1,09,037 ; from miscellaneous sources Rs 9,797 were derived ; and the total Government grant was Rs 43,588 ; while the management out of its own funds contributed Rs 70,307. In other words even when the management puts in a rupee and a half it does not get a rupee from public funds. Finance is not so easy as it is sometimes represented. At the risk of mentioning our own good deeds I may say that in the case of students belonging to the Backward Classes we forwent Rs 3650 of fees. As Government grant did not cover all the net cost of the College this sum of Rs 3650 was really a gift made by the College from its own resources to these classes to help them forward in the battle of life. I can only say that our sympathy comes under no statute of limitation, but as expressed in rupees it does.

Notwithstanding all such difficulties we still go on imparting here what we regard as a real education, and we are encouraged by the hundreds who bring to us their eager minds and quickening spirit.

For eight times in succession it has been my privilege to speak to you on the occasion of our annual prize-giving. This fact is sufficient to indicate that the time has now come for another voice to be heard. And when I further add that I am now suffered to be in my thirty-sixth year of service in this College, it will be readily admitted that it is high time for another hand to hold the helm. And I am grateful that, within a few weeks, the destinies of the College will be presided over by one who will bring to bear on them qualities of head and of heart which he so eminently possesses, which are so greatly needed, and in which I am so obviously deficient. Our heartiest good wishes attend Dr. Hogg as he assumes the duties of the acting principal.

During these thirty-five years there have been many vital changes in this land of India, and this College has been responsible for no small part of them. But amidst this flux there have been three constants. First, the College with its abounding life and inspiration, which every year makes it a greater privilege to serve. Second, the staff with its high qualifications and its unceasing labours, to the members of which I would express my deepest gratitude for a co-operation which has lightened all my burdens and intensified the power of the College. Third, the students of the College with whom it is a joy to be associated, whose fresh life largely annihilates the flight of years, and for whose

devotion to their College I desire to assure them of my constant sense of obligation.

In closing, and who knows whether I shall be permitted to speak to you again on such an occasion ? let me commend to you two thoughts.

The first is that this College is the home of national life. I felt that in my first year, when there was little talk of national life. For I noticed how through the alphabetical arrangement of the students of a class, there sat side by side on the same bench a Muhammadan, a Hindu, a Parsee, and a Christian; and they sat in the most friendly proximity. That picture has never left my mind's eye all these years. The essence of a nation is unity in diversity, but in the first place unity. And that diversity of gifts but the same spirit is what the College nourishes in an intimate manner. In love of your mother land which needs men, real men, not words, and men united by good will not separated by hate, let this function of the College sink deep into your souls. Let it never desert you. You can belong to a party and yet be true to the interests of your nation. But you can never be divisive and promote your country's good; you can never be divisive and count yourself as a loyal son of this College. This College is pervaded by a spirit of unity, the spirit of God who would make all one. It breathes the atmosphere in which a pure, strong, upraising national life is reared. Woe be to him who would vitiate that atmosphere.

The second thought that I would commend to you is this : This College is the home of personal life. Here every opportunity is given to a man to know the riches of the mind, to exercise his judgement, to form convictions. Here he is encouraged to be brave enough to be in the right with two or three, to reverence his conscience whatever be the consequences, and to follow truth though its road be rough. Here he has the chance of forming lasting and valuable friendships, and of realizing how vital for life is the friendship of Jesus. Here his eyes open to the fact that life has infinite possibilities and joy, but that it is a poor thing if it is not used as a trust from God. All these opportunities reveal themselves to you in the work of the College from day to day. Give good heed to them; respond to them fully; and your life will be stablished, strengthened, settled. Wherever your lot may be cast, you will not be alone, for God will be with you. May God's choicest blessings attend you in all your going-out and your coming-in from this time forth, even for evermore.

Dr. Meston in introducing the chairman referred to the Honourable Sir Muhamad Usman as one of the most loyal of the old students of the College. Sir Muhamad then distributed prizes to the following students.

FIRST CLASS

THE LORD PENTLAND PRIZE

B. Sivaraman

THE AMJUD PRIZE

S. S. Sebastian }
W. E. Eling } *equal*

GROUP PRIZES

GROUP I. B. Sivaraman
GROUP II. D. Viswanatha Reddi
GROUP III. S. Venkataraman

THE WEST COAST PRIZE
(*For proficiency in Scripture*)
B. Sivaraman

THE CHINNASWAMI PILLAI PRIZE
(*For proficiency in Tamil Composition*)
B. Sivaraman

ILAYALWAR CHETTI SILVER MEDAL
(*For proficiency in Sanskrit*)
R. H. Ranga Rao

TELUGU PRIZE
N. Palasankaran

MALAYALAM PRIZE
P. S. Sadasivan

URDU PRIZE
M. Muhammad Habib

LATIN PRIZE
J. R. French

FRENCH PRIZE
D. Raghavan

SECOND CLASS

THE JUNIOR MILLER PRIZE
J. B. Appaswami

GROUP PRIZES

GROUP I. V. A. Ponnaiya (THE RAMIAH PRIZE)
GROUP II. S. Sampath (THE AMJUD GOLD MEDAL,
GROUP III. J. B. Appaswami

THE MATTHAI PRIZE
(*For proficiency in Scripture*)
J. B. Appaswami

THE SETUPATI GOLD MEDAL
S. Subramanian

THE CRAIG PRIZE
(*For proficiency in English Composition, Intermediate Classes*)
J. B. Appaswami

THE RAJAGOPALA RAO PRIZE
(For proficiency in Telugu)
K. V. Subba Rao } *equal*
P. Venkateswara Rao }

THIRD CLASS

THE GUNN GOLD MEDAL
M. P. Alexander

GROUP PRIZES

GROUP I. R. Narasimhachari

GROUP II. THE DEWAN BAHADUR KRISHNAN NAIR PRIZE
(For proficiency in Gr. ii-A, Physical Science)
R. Sambasivan

GROUP III. S. Thangiah

GROUP IV. THE MACKENZIE PRIZE
(For proficiency in Gr. iv. Philosophy)
V. Kelukutti Eradi

GROUP V. THE RUSSELL PRIZES
(For proficiency in Gr. v. History and Economics)
1. M. P. Alexander
2. P. S. Duraiswami

THE KORA EAPEN PRIZE
(For proficiency in Scripture)
O. S. Noone

FOURTH CLASS

THE MILLER GOLD MEDAL AND PRIZE
K. V. Ramanujam

GROUP PRIZES

GROUP I. THE ROSS PRIZE
(For proficiency in Gr. i. Mathematics)
P. Krishnaswami

GROUP II. THE ABERDEEN PRIZE
(For proficiency in Gr. ii-A. Physical Science)
T. Vittal Rao

THE RANGA REDDI MEMORIAL PRIZE
(For proficiency in. Gr. ii-A. Physical Science, as tested by the B. A. Degree Examination)
D. Sitaramadas

GROUP III. THE BUCKIE PRIZE
(For proficiency in Gr. iii. Natural Science)
S. Varadarajan.

GROUP IV. THE COOPER PRIZE
(For proficiency in Gr. iv. Philosophy)
D. Govindarajulu

THE ETHIRAJA PILLAI PRIZE

(For proficiency in English Composition)

K. V. Ramanujam

THE ELIZABETH MILLER GOLD MEDAL

C. F. Dwyer

THE RIPON GOLD MEDAL

C. F. Dwyer } *equal*
K. V. Ramanujam }

THE SKINNER GOLD MEDAL AND PRIZE

C. F. Dwyer

HONOURS CLASSES

THE ELIZABETH MILLER PRIZE

(For proficiency in Scripture)

S. Parthasarathi

THE MORREN GOLD MEDAL AND PRIZE

(For proficiency in Br. i. Mathematics, 5th year Honours)

T. M. Subramanian

THE MILLER PHILOSOPHY PRIZE

(For proficiency in Br. ii. Philosophy, 5th year Honours)

M. C. Dharmaraj

THE KELLETT PRIZE

(For proficiency in Br. iii. History, 5th year Honours)

V. Iswaran

PRIZES FOR SCRIPTURE KNOWLEDGE

(Awarded on the results of the Peter Cator Examination)

CATOR TRUST

A. D. Vedamani, Rs 40

COLLEGE PRIZES

O. S. Noone	...	Rs 20
C. S. Appaswami	...	„ 10

After distributing the prizes Sir Muhamad Usman spoke a few words of counsel to the students. He reminded them of the great principles for which the College stood and the spirit of love and service which it fostered. He asked them to make the best use of the opportunities which the College offered for intellectual advancement and moral enlightenment.

Later in the evening the College Council and the College-Day Association were at home to the New Graduates. After an enjoyable tea had been partaken of, a short meeting was held in the College Hall, Sir Muhamad Usman presiding. The Chairman and the Secretaries of the College-Day Association—Messrs. Balasingam Satya and Sanjeeva Kamath—exhorted the new graduates to keep alive their affection for the College and strengthen the bonds that linked them to it by enlisting themselves as members of the College-Day Association and by subscribing to the College Magazine.

Mr. C. F. Dwyer, in returning thanks on behalf of the New Graduates for the enjoyable entertainment said, 'On such a solemn occasion it behoves us, the children of our mother at whose breast we have fed to express our profound sense of thankfulness for all her devotion and care. She has instilled in us the truth that manliness and uprightness are more to be prized than mere scholastic distinction. Character, not worldliness, is her watchword. She has taught us that religion is the very essence of one's being, not an assent to any system of doctrine, but a way of life.' After referring to the manifold benefits the College has conferred upon them he concluded his short-speech in the following words:

'O, mater, by whose buoyant spirit cheered,
In whose experience trusting, day by day
Treasures I gained with zeal that neither feared.
The toils nor felt the crosses of the way,
These records take, and happy should I be
Were but the gift a meet return to thee
For kindnesses that never ceased to flow,
And prompt self-sacrifice to which I owe
Far more than any heart, but mine, can know.'

Farewells to Dr. Meston

THE REV. W. MESTON, M.A., D.D., THE PRINCIPAL OF THE COLLEGE, is shortly proceeding home on furlough. His health permitting we hope that he will come back to the scene of his magnificent service. The College, his old students and his many friends will miss him; but the pain of separation will be considerably relieved by the hope of his return. To Dr. and Mrs. Meston we wish a safe voyage home, a happy sojourn in fair Scotland, and a speedy return to our midst. The sure place that Dr. Meston occupies in the affection of his colleagues, his old students and his friends and the esteem in which he is held in the academic circles of this province have been amply demonstrated by the large number of farewell functions held in his honour recently. Practically every evening towards the close of the Michaelmas term witnessed some such function.

The College Park Hostel

THE COLLEGE PARK HOSTEL, probably because of its physical nearness to the person of the Principal began the series. On the 27th August at an informal gathering of the members of hostel and their friends an affectionate farewell was given to Dr. and Mrs. Meston.

The College Photograph

ON FRIDAY, 31ST AUGUST, for the first time in the history of the College a panoramic photograph of the staff and the students of the College was taken. Copies of this interesting photograph may be had through the Principal's office or direct from the photographers, Messrs. M. Doss Brothers, New Town.

The Lecturer's Association

AT THE INSTANCE OF THE LECTURERS' Association a group photograph of the staff of the College was taken in honour of Dr. Meston on Friday, 24th August. The photograph is reproduced as the frontispiece of this Magazine.

The Syndicate of the Madras University

ON THE INVITATION OF THE VICE-CHANCELLOR and the past and present members of the Syndicate a large and distinguished company met at the Senate House to do honour to Dr. and Mrs. Meston. Dewan Bahadur K. Ramunni Menon, the Vice-Chancellor, speaking on behalf of the members of the Syndicate expressed their great appreciation of the valuable contribution Dr. Meston had made to the growth and progress of the Madras University prior to the passing of the University Reform Act of 1925 and since. As a token of their esteem and gratitude he presented to Dr. Meston a silver rose bowl. The Zemindarinee of Kumaramangalam and Dewan Bahadur K. Ramunni Menon garlanded Mrs. Meston and Dr. Meston respectively. Dr. Meston, who, on rising, was given an ovation, returned thanks on behalf of Mrs. Meston and himself for the honour done to them. He said that the Syndicate of the University was a unique body noted alike for its culture and for its integrity and that it had been a pleasure and a privilege to him to have been associated with it for a long time in the service of the youth of South India. He wished the University every success in the work that lay before it.

The College Staff-Council

The members of the College Staff-Council entertained Dr. and Mrs. Meston at tea in the Botany Hall on Tuesday, 4th September at 4-30 p.m. The arrangements were in the capable hands of Mrs. Woodburne and left nothing to be desired. After a pleasant hour had been spent in conversation Mr. M. S. Sabhesan, on behalf of the staff, wished Dr. and Mrs. Meston a happy holiday in their home-land and a speedy return to the College. Referring to Dr. Meston's services he said that his task had been considerably lightened by the Vice-Chancellor of the University who had on the previous evening paid an eloquent tribute of praise to Dr. Meston for his services to the cause of education in South India. Mr. Sabhesan contented himself by saying that as the staff of the College had worked together as a happy family, it was a matter for regret that Dr. Meston would be away from their midst for some time, but he hoped that Dr. Meston would soon be restored to full health and be back with them again. Dr. Meston thanked the staff for the honour done to Mrs. Meston and himself. He said 'one thing that characterized the staff of the College more than anything else is harmony. As in the work of the College, so in the matter of elections to the various bodies of the University, the staff has worked together in absolute unanimity. I have always found co-operation and loyalty. I am grateful to the staff for this. Day by day, as I have been walking over the College I have been overcome by a feeling of the superiority that surrounds me. Every member of the staff is giving of his best to the College. The Principal of this College is one of many who have the direction and control of the work of the College. He

cannot force his will upon others. No action of any significance has been taken that had not the consent and approval of the staff. But after thirty-five years of service in this College I am thankful to feel that I am not looked upon as a fossil and that I am credited with the possession of what I am pleased to call my mind. Whatever the future may bring, let us do the duty laid to our hands.'

The Presidency College

THE PRINCIPAL AND PROFESSORS of the Presidency College entertained Dr. and Mrs. Meston at tea on Wednesday, 6th September.

The Old Students and the College-Day Association

AN ACCOUNT OF THE ENTERTAINMENT given in honour of Dr. and Mrs. Meston by the old students of the College and the College-Day Association will appear in the next number of this Magazine.

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